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OIL WORLD

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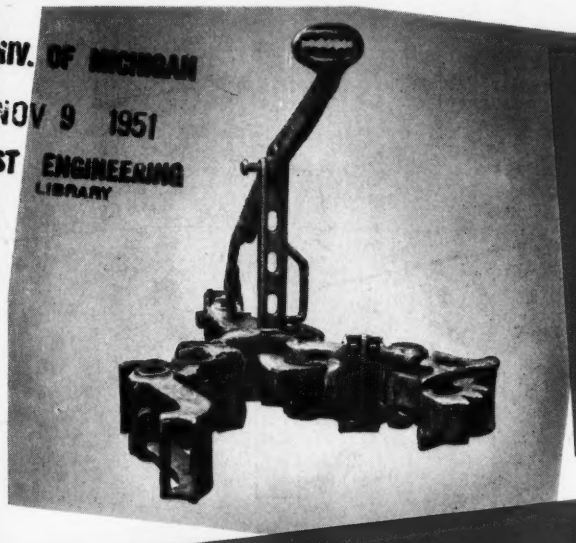

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OIL WORLD

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October 31st, 1951
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# Washington Highlights

The country's crude oil capacity stood at 1,000,000 barrels a day in the middle of 1950. Currently, it has dropped to half that figure. Commenting on the trend of oil output. Interior Secretary Chapman said over the next five years, the United States will find it possible to boost productive capacity by approximately 250,000 barrels daily annually, provided operators obtain the materials necessary. The Federal officials also confirmed that recent hikes in military demand for petroleum and rebound from the refinery shutdown in Iran have left this country short of refining capacity. He viewed the daily expansion, entailing expenditures of $1,000,000 a day, planned for completion at the end of 1953, as not giving enough spare facilities and power to assure that all future emergencies could be met. He cited materials as also holding back new refinery construction. This is also true as regards pipelines, Chapman explained. He called attention to the fact that at present 300,000 barrels a day of crude oil possible of production is backed up in the West Texas-New Mexico Basin because there is no pipeline to carry it and for the same reason still another 100,000 barrels daily is stagnant in the Rocky Mountain region. Pipelines are operating at close to capacity. Chapman reckoned that the Petroleum Administration for Defense has been the recipient this year of applications from operators who seek to build more than $600,000,000 worth of new pipeline facilities. These new projects require some 1,500,000 tons of steel and the critical shortage of line pipe has not made it possible for the PAD to allow all of the needed work to go forward any faster.

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Republican National Chairman Gabrielson announces plans for broadening his party's 1952 chances among nationality groups and in the maximal Democratic South.

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The Petroleum Administration for Defense has issued two orders calling for increased output of aviation gasoline. One order requires that raw materials available for production of alkylate be used as directed by the PAD to make certain maximum production of this gasoline component. It is also designed to prohibit the use of alkylate and other types of blending agents in anything but motor fuel. The other order places a base on the amount of tetraethyl lead which may be used in the manufacture of aviation gasoline.

---

California's population on April 1, 1950, totaled 10,586,223. This was recently made final and official by the U. S. Census Bureau, which pointed out that the gain in population in the state was 53.3 per cent over the 1940 census count of 6,907,387.

A geological survey report announced by the Interior Department related huge oil-shale deposits are within reach for development in Garfield County, Colo. It is viewed generally as one of the richest areas for an oil-shale industry in the country.

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News from California indicated that Governor Earl Warren was "not surprised" by the announcement of Senator Robert A. Taft that he is a candidate for the Republican presidential nomination. California's Chief Executive is rated the leading dark horse candidate for the Republican nomination.

---

Widening interest in noted in Government lands as a future source of petroleum. This is attested by the more than 200,000 applications which have been filed for U.S. oil and gas leases since the Mineral Leasing Act of 1920 was passed. Records disclosed that during the 30-year period 14,733 wells have been drilled on public lands and an amount in excess of $260,000,000 has come to the Government from rents and royalties on petroleum developed. These important facts are emphasized in a book written by Lewis Hoffman, chief of the branch of minerals, U. S. Bureau of Land Management. The volume is titled "Oil and Gas Leasing on the Public Domain."

# Rich Oil Rectification

By EDW. G. RAGATZ
Consulting Engineer and Associate,
J. B. Gill Company

It is generally recognized that propane bears the same relation to today's natural gasoline plant operations that natural gas bore only a few years ago—namely, that it is only a matter of time until sufficient transportation and storage facilities will be made available whereby this lightest of liquefiable petroleum fuels will be conserved and marketed "as such" to the full capacity of the majority of its more efficient production facilities. Consequently, most of today's natural gasoline plants contemplating a reasonably extended operating life can anticipate a near future, if not immediate, serious questioning regarding their ability to efficiently produce high-percentage yields of propane.

A properly processed rich-oil rectifying unit is an essential element in such production; and on this basis we will discuss the prime function of the rich-oil rectifier, when its employment should be seriously considered, some important economic and operational comparisons of various rectifier flow arrangements, and several important efficiency and specialized control factors associated with the rich-oil rectifier operation.

The essential role played by the rich-oil rectifier in modern high-recovery propane operations can be best appreciated by an understanding of its process development through several extensively employed earlier process cycles—hence the first part of this paper will be devoted to a brief review of that phase of the subject.

In early absorption plant operations propane recovery was a "side issue," and equipment design focused almost solely on effecting desired recoveries of butane and heavier fractions from the rich gas. Under these circumstances oil-circulation rates were quite low, and even though the stripping stills were operated at relatively low pressures, the resultant volumes of light vapors released from the rich-oil "flash tanks" and stripping-still "accumulators" were correspondingly low —with the result that such vapors could be and were readily handled at appropriate reabsorbers at little additional investment and operating cost.

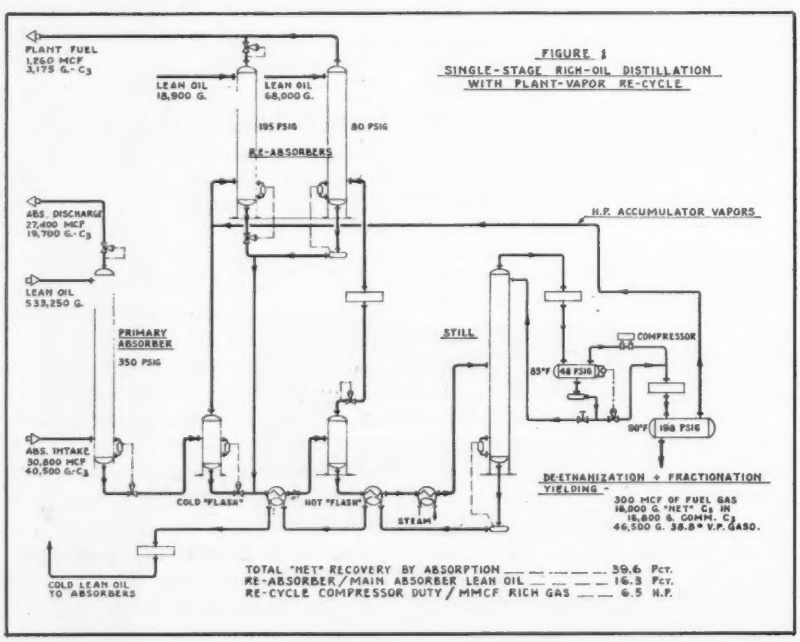
As the early low oil-circulation rates were increased looking to increased propane recoveries, however, the accompanying volumes of plant vapors requiring reabsorption treatment steadily increased, with this increase being particularly marked in the case of the still-accumulator vapors. Eventually these recycled vapor volumes became sufficiently large, and the costs of their handling sufficiently important, to call for process changes in the original simple low-pressure plant cycles.

The most obvious initial cycle change, and one which was readily applicable to existing low-pressure plants, involved compressing the low-pressure still accumulator vapors to a substantially higher pressure for introduction into a second, high pressure, condensing and accumulating stage — with the low-pressure still condensate being simultaneously pumped into the higher pressured condenser for its "sponge" effect. This change improved the efficiency of the increased propane recovery operations by both decreasing the volume of accumulator vapors released, and increasing the pressure at which their reabsorber could be operated. This initial improvement, however, proved to be economically effective over only a small additional propane recovery range.

Figure 1 presents typical key operating data for such a cycle operating at the upper edge of economic applicability on 350 psig rich oil. Although the absorber recovery of propane in this particular instance amounted to only 51.4% (with a corresponding net stock-tank recovery of only 39.6%), both reabsorption-oil rate and recompressor horsepower requirements were such as to obviously preclude economic increasing of the noted relatively low propane recoveries. The reason for the relatively poor economic showing of this particular cycle resides in:

1. The large volume of vapors handled by the recompressors at relatively high compression ratios—resulting in the employment of 6.5 HP/MMCF of rich-gas feed for the example of Figure 1.
2. The low pressures employed at the reabsorbers — resulting

FIGURE 1
SINGLE-STAGE RICH-OIL DISTILLATION
WITH PLANT-VAPOR RE-CYCLE



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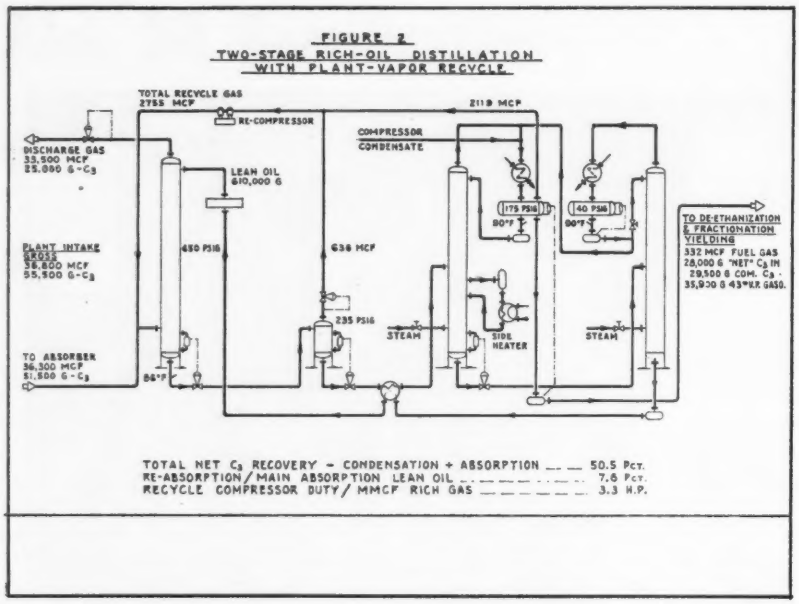


FIGURE 2
TWO-STAGE RICH-OIL DISTILLATION WITH PLANT-VAPOR RECYCLE

TOTAL NET $C_3$ RECOVERY - CONDENSATION + ABSORPTION ..... 50.5 PCT.
RE-ABSORPTION/MAIN ABSORPTION LEAN OIL ..... 7.6 PCT.
RECYCLE COMPRESSOR DUTY/MMCF RICH GAS ..... 3.3 H.P.

in a reabsorption oil requirement of 16.3% that of the main-absorber oil circulation for the example of Figure 1.

The next, and quite generally adapted, process solution to the above-noted weaknesses of the "low-pressure still, vapor recompressor" cycle was the two-stage stripping still cycle in which the first stage of vapor compression was effected by application of heat, rather than mechanical, energy. In this cycle the rich oil is initially stripped of its lightest fractions at a still operating in the same general pressure region as the recompressor discharge of the previously-discussed cycle, after which the remaining heavier components of the rich oil are recovered at a second, substantially lower-pressured still operating "total condensing." As with the previous cycle, the second stage condensate is pumped over the first stage high-pressure condenser for its sponge effect, and the vapors discarded from the high-pressure accumulator are treated at an appropriate reabsorber—with these vapors often being recompressed to main absorber pressure for high-pressure absorption at the main absorber along with the rich plant-intake gas.

Figure 2 presents typical key operating data on such a two-stage stripping still unit handling rich-oil from a 450 psig absorber. While the operation of this particular unit cannot be compared in detail with that of Figure 1 due to differences in feed quality and absorber pressures, as well as the fact that compressor condensate was being handled in the Figure 2 operation while omitted from Figure 1, it nevertheless is clearly evident that the cycle of Figure 2 is a distinct improvement over that of Figure 1 in that:

While the main-absorber propane recoveries were of the same order for both cycle examples, only half as much compressor horsepower, and less than half as much reabsorber lean-oil, was required by the two-stage still cycle to equal (if not exceed) the stock-tank recovery of absorbed propane obtained with the single-stage still cycle.

While relatively efficient in the 50% propane recovery region, the two-stage stripping still cycle falls off rapidly in recycle-vapor handling efficiency at propane recoveries above this figure due to "compounding" of the accumulator recycle-vapor volumes at the higher propane recovery rates. This "compounding" results from the following basic absorption relationships:

1. By the time propane recoveries of the order of 50% have been achieved, all available heavier ends have been recovered and already employed for their "sponge" effect in holding the earlier recovered propane in the still-accumulator liquid—hence any additional propane recovery must "stand on its own feet" in effecting the liquid-composition adjustments required to add it "as a liquid" to the earlier recovered liquid products.
2. Process designers have in general found it necessary to limit the second stage condenser pressures to levels only slightly higher than the vapor pressure of pure propane at available condenser temperature. Hence, if the "50% plus" increment of propane reaching the ac-

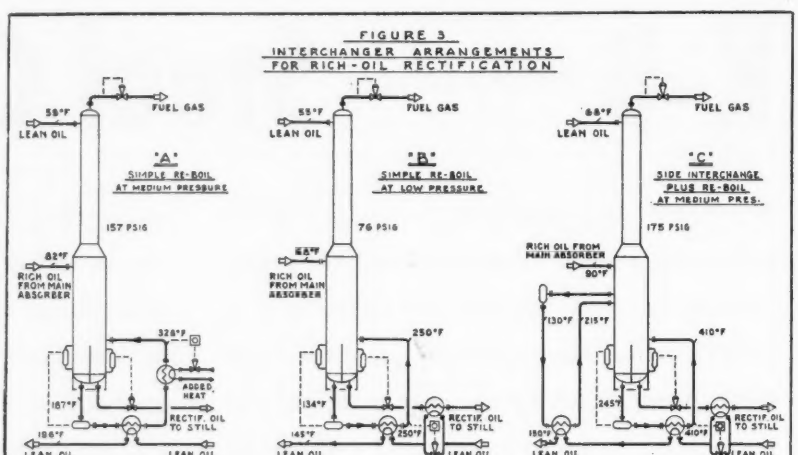


FIGURE 3
INTERCHANGER ARRANGEMENTS FOR RICH-OIL RECTIFICATION

PROCESS-FLOW COMPARISONS

| | | A | B | C |
|---|---|---|---|---|
| MAIN ABSORBER PRESSURE | PSIG | 553 | 360 | 450 |
| MAIN ABSORBER OIL RATE | GAL L.O./M.C.F. R.G. | 11.2 | 28.6 | 15.6 |
| MAIN ABSORBER RECOVERY OF PROPANE | PCT. | 59.3 | 88.1 | 65.0 |
| RICH-OIL RECTIFIER RETENTION OF PROPANE | PCT. | 91.6 | 96.4 | 88.0 |
| "NET" OVERALL PROPANE RECOVERY | PCT | 54.3 | 85.0 | 57.0 |
| RE-ABSORBER/MAIN-ABSORBER LEAN OIL | PCT. | 21.4 | 49.2 | 12.5 |
| "R.G. FROM ABS.-L.O. TO COOLER" APPROACH | °F | 114 | 77 | 60 |

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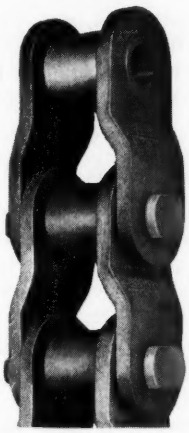

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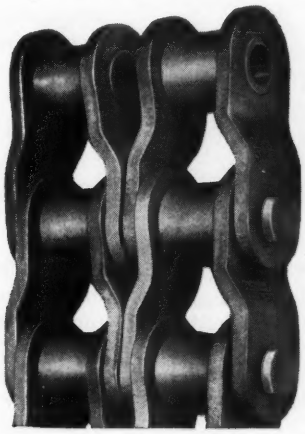

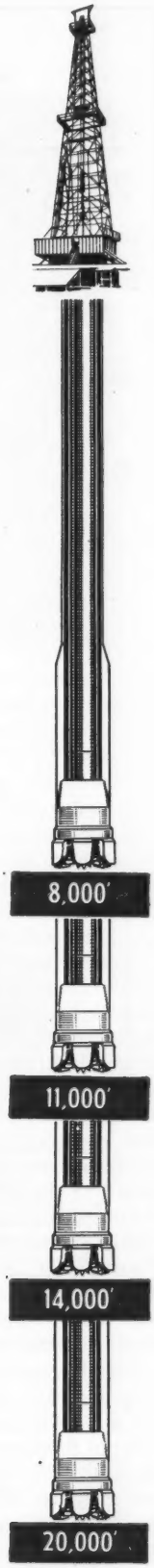


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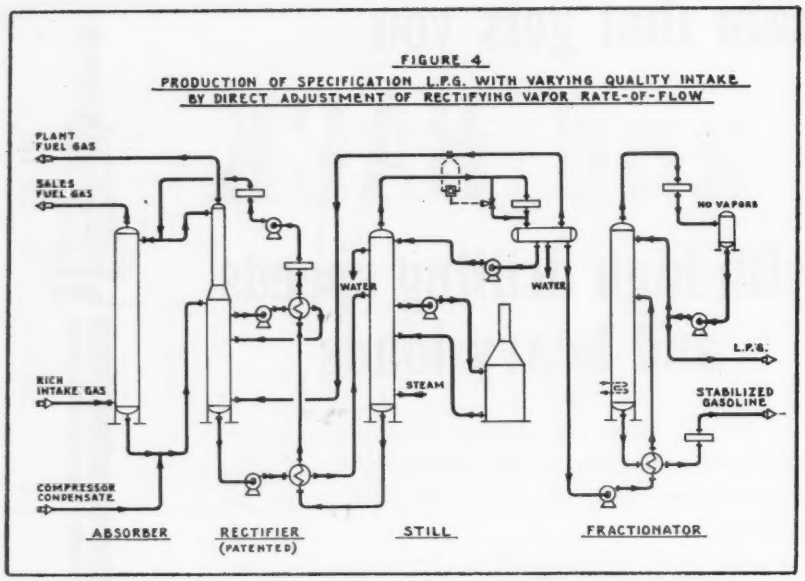


cumulator carries any appreciable amount of ethane and lighter fractions with it, the only way said propane increment can get into the accumulator liquid is to "pump" lighter undesired fractions therefrom by development of a large propane recycle between the reabsorber and still accumulator—which action accounts for the noted "compounding" of recycle-vapor volumes with the conventional two-stage stripping still cycle at propane recoveries above 50%.

The obvious answer to this last process problem resides, of course, in the distillation removal of all undesired light fractions from the rich-oil stream ahead of the stripping still. When the undesired lights are thus removed, all absorption-recoverable propane can be readily retained in the still overhead product at conventionally prevailing accumulator pressures and temperatures. Furthermore, the still condenser can then be operated "totally condensing" with employment of only a single distillation stage.

Broadly, such rich-oil distillation units may be called upon to sharply cut a portion of the absorption-recovered propane to fuel gas for production of a close-specification vapor-pressure LPG; to sharply cut between ethane and propane for maximum production of close-specification vapor-pressure commercial propane; or to sharply cut a portion only of the ethane overhead looking to production of a finished light-liquid stream containing a relatively high-specification quantity of ethane.

This range of rich-oil distillation requirements can be fully met by replacing the conventional rich-oil "flash tanks" with a tray-equipped rectifying column, feeding the resultant rectifier overhead stream into an appropriate reabsorption column, and returning the resultant rich reabsorption oil to the rectifier —which equipment arrangement constitutes the "rich-oil rectifier" of the subject paper.

The earliest rich-oil rectifier designs drew on conventional distillation practice for their formulation—resulting in a simple reboil-heated units such as described by Whistler[1] in a prior CNGA paper. While these earlier units employed hot lean oil for their major heat supply, the temperature levels of their operation were such that large amounts of low-level heat had to be discarded from the lean oil at the lean-oil water coolers when operating at the higher, more efficient, reabsorber pressures. Operating at lower reabsorber pressures to conserve this low-level heat, on the other hand, required employment of undesirably high reabsorption oil circulation rates. Later, the rectifier "side stream" heat-interchange cycle[2, 3] was developed as a solution to the uneconomic alternates of these two earlier simple reboil cycles.

Figure 3 presents comparative key process data for these three rich-oil rectifier cycles. In this figure, Column "A" presents data on a conventional base-heated rectifier operating in the upper range of normally employed reabsorption pressures; Column "B" presents data on a similar conventional unit operating at a low reabsorber pressure; and Column "C" presents data on a typical "side-stream" heat interchanged unit operating in the upper reabsorber pressure range.

While these particular operations cannot be directly compared "down to the last detail" due to variations in main absorber operating pressure, quality of rich oil undergoing rectification, and over-all propane recovery, they do clearly illustrate the relative heat recovery characteristics of the three respective cycles.

One of the best yardsticks for comparative evaluation of lean-oil heat recovery in such operations is the temperature "gap" between the lean oil going to the water coolers and the rich oil from the main absorber. Referring to Figure 3 we see that:

The flow of Column "A" gave the poorest heat recovery. In fact, its recovery was so poor that added heat had to be obtained from an outside source to provide proper "trimming" temperature control on the rectifier reboiler.

The flow of Column "B" so improved on the heat recovery accomplished with Column "A" that additional heat could be recovered from the lean oil by appropriate heat interchange with the rectified rich oil on its way to the still. However, the low reabsorption pressure which made this heat recovery possible called for a corresponding undesirably large reabsorber oil ratio.

The flow of Column "C", while operating with the highest heat recovery of the three cycles, simultaneously operated at the highest reabsorber pressure and lowest reabsorber oil rate.

Appreciation of the economic significance of the heat-recovery differences exhibited by these three different cycles may be enhanced by noting that:

1. Operating Column "A" on the

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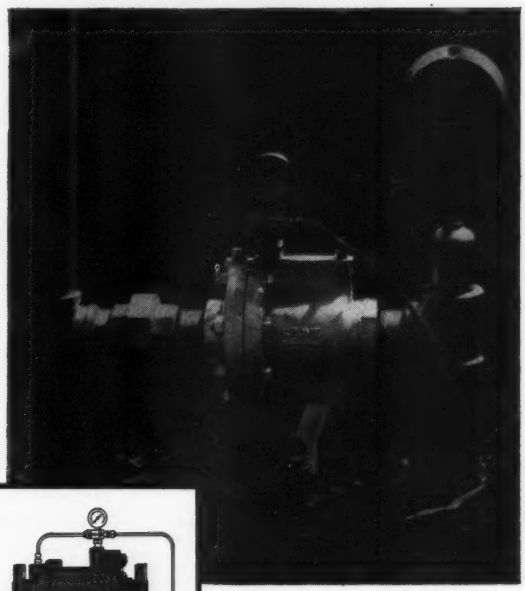

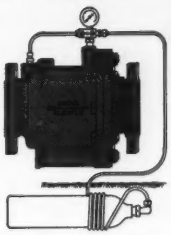

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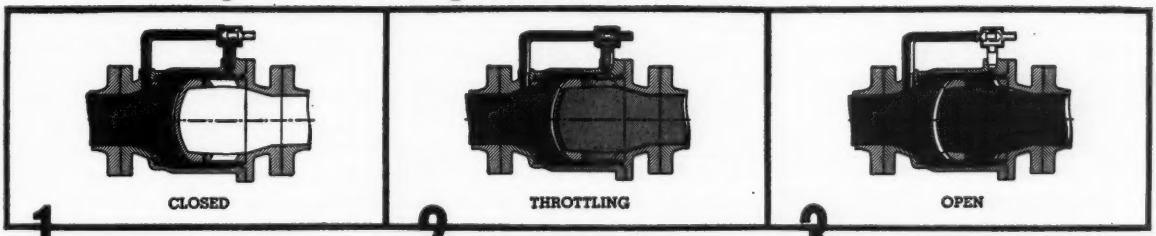

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more efficient cycle of Column "C" would permit, for the actual operating case cited, a 40% reduction in the heat load carried at the fired heater of the companion stripping still.

2. Heating 100 GPM of lean oil from 150° F. to 200° F. in a fired heater operating at 70% efficiency on 1200 BTU gas valued at 15¢/MCF represents a yearly fuel charge of $1,700.00 —which charge, in the case of the rich-oil rectifier operation, must be augmented by corresponding depreciation and operating charges for the additional BTU loads imposed on the companion still-heating and water-cooling equipment.

In keeping with conventional fractionating-column practice, the early rich-oil rectifier designs relied on simple adjustment of the reboiler temperatures to control the degree of cut between overhead-rejected light fractions and absorption-oil retained heavier components. When applied to the daily cyclic change in plant-intake quality encountered in most absorption plants, however, this simple control often proved inadequate — particularly for plants operating in the upper propane-recovery ranges. As a consequence, various secondary "trimming" controls have been added to the primary reboiler-temperature control for effecting those precise secondary adjustments required to keep the rectifier operation in step with daily cyclic changes in plant-intake quality. Of such controls, the following are currently employed in one or more plants with which we are familiar:

1. Recycling of uncondensed vapors from the stripping-still accumulator back to the rectifier reabsorber.
2. Recycling of a stream of depropanized liquid from a product fractionator back to the rectifier.
3. Adjusting of the main absorber lean-oil rate to hold a constant propane or isobutane absorption factor at the main absorber.
4. Adjusting the pressure carried on the rich-oil rectifier.
5. Adjusting the lean-oil rate to the rectifier reabsorber.
6. Adjusting the rate of rectifying-vapor flow into the rectifier base.

If the variation in plant intake quality is not extreme, our experience indicates that precise control of final light-product quality can be readily obtained by holding the rectifier reboil-temperature substantially constant while maintaining either fixed oil rates, or constant "lean-oil/gas" ratios, at the main absorber and rectifier reabsorber, and then appropriately adjusting the volume of rectifying vapors employed at the rich-oil rectifier by direct measurement and control of said vapor volume to compensate for the daily cyclic changes in plant-intake quality.

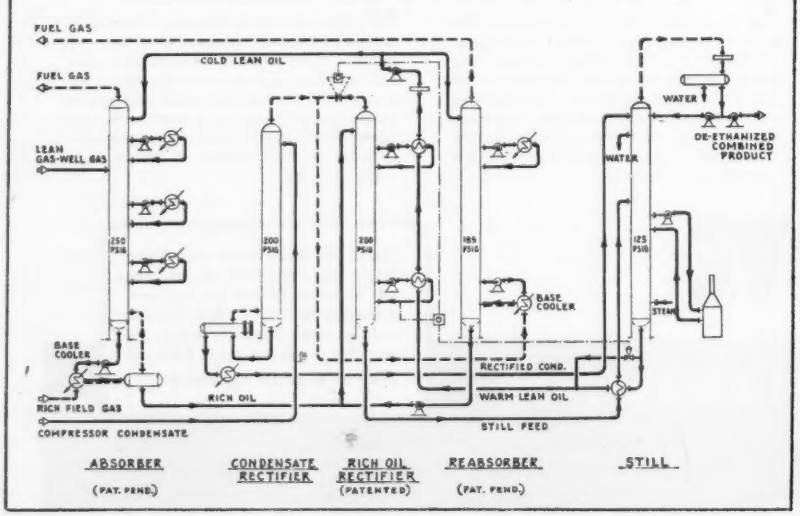
An excellent example of a rectifier operation employing such a direct vapor-flow control is presented in accompanying Figure 4, in which the vapors introduced into the rich-oil rectifier are obtained from the still-product accumulator by aid of a flow-controller operating to regulate the temperature of the production stream entering the accumulator.

In one operation with this equipment, a maximum amount of butanes-plus are recovered at the absorber, and the resultant still-product separated at a single fractionator into a 15.0—15.5 pound stabilized gasoline bottoms and a 100 or 125 pound LPG overhead. The amount of absorption oil employed with this operation to achieve maximum recovery of butanes at the main absorber is such that the amount of propane simultaneously recovered is more than can be blended into specification LPG with the butane remaining from the production of 15.0 —15.5 pound gasoline. As a consequence, a portion of the absorbed propane has to be discarded overhead at the rich-oil rectifier, and employment of the indicated "measured" rectifying-vapor volume control has made it possible to so precisely adjust the quantity of propane thus discarded that an extremely close control can be maintained on the vapor-pressure of the resultant LPG product.

In Table 1 we present pertinent operating data from this unit which clearly demonstrate why control by adjustment of the rectifying-vapor flow, rather than conventional adjustment of the reboiler temperature, makes possible an extremely close control on the resultant LPG vapor pressure. Referring to this table, it will be noted that with most pertinent operating conditions remaining substantially constant, a seven-pound variation in the LPG vapor pressure resulted in only a 3° F. temperature difference in the rich-oil leaving the rectifier base—which small temperature difference is obviously outside the range of practical intermediate adjustment. On the other hand, the volume of rectify-

FIGURE 5

PRODUCTION OF SPECIFICATION PROPANE WITH VARYING QUALITY INTAKE BY COMBINATION ADJUSTMENT OF REBOIL TEMPERATURE & VAPOR FLOW



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ing vapors introduced into the column base changed from 1700 MCF/D to 1425 MCF/D—which variation is large enough to permit of precise intermediate adjustment for production of a range of vapor pressures between the 118 pound and 125 pound figures of the table. In fact, with this particular control the plant in question finds no difficulty whatever in regularly holding its LPG shipments within plus or minus 1.5—2.0 pounds of their specification mean.

**Table 1**
**Rectifier Control Changes vs L.P.G. Quality**
**For Flow-Diagram Operation of Figure 4**

| | | | |
|---|---|---|---|
| Rich Gas to Main Absorber ..... | MCF/D | 9775 | 9600 |
| Compressor Condensate to R.O.R. .. | GPM | 6.2 | 6.2 |
| Rich-Oil Rectifier Pressure ..... | PSIG | 98 | 97 |
| Lean Oil to R.O.R. Re-Absorber .... | GPM | 35 | 38 |
| Fuel Gas Out R.O.R. Re-Absorber ... | MCF/D | 900 | 770 |
| Rich-Oil Out Side Exchanger ..... | °F | 190 | 190 |
| Rich-Oil Out R.O.R. Base ..... | °F | 179 | 182 |
| Vapors Into R.O.R. Base ..... | MCF/D | 1700 | 1425 |
| L.P.G. Vapor Pressure ..... | LPG BOMB | 118 | 125 |
| Stabilized Gaso. V.P. ..... | # REID | 15.2 | 15.2 |

While simple adjustment of an appropriate secondary control with the rectifier base-temperature held substantially constant will suffice to yield close control of light-end product quality when the cyclic changes in plant-feed quality are not too large, cases where such changes are extreme often require a coordinated adjustment of the rectifier bottoms temperature with the secondary control adjustment.

A simplified flow-sheet of a plant installation employing such a dual control is presented in Figure 5. This plant handles two streams of intake-gas of widely different composition, namely, streams having concentrations of propane and heavier of some 12.50 gal/mcf and 0.75 gal/mcf. A specially cooled absorber is employed for handling the two gas streams, with the rich-gas stream being introduced into a base-cooler associated with the bottom section of the column while the lean gas stream is introduced near the top of the column. Oil circulation rates are maintained at a constant "lean oil/lean gas" ratio with an appropriate ratio controller.

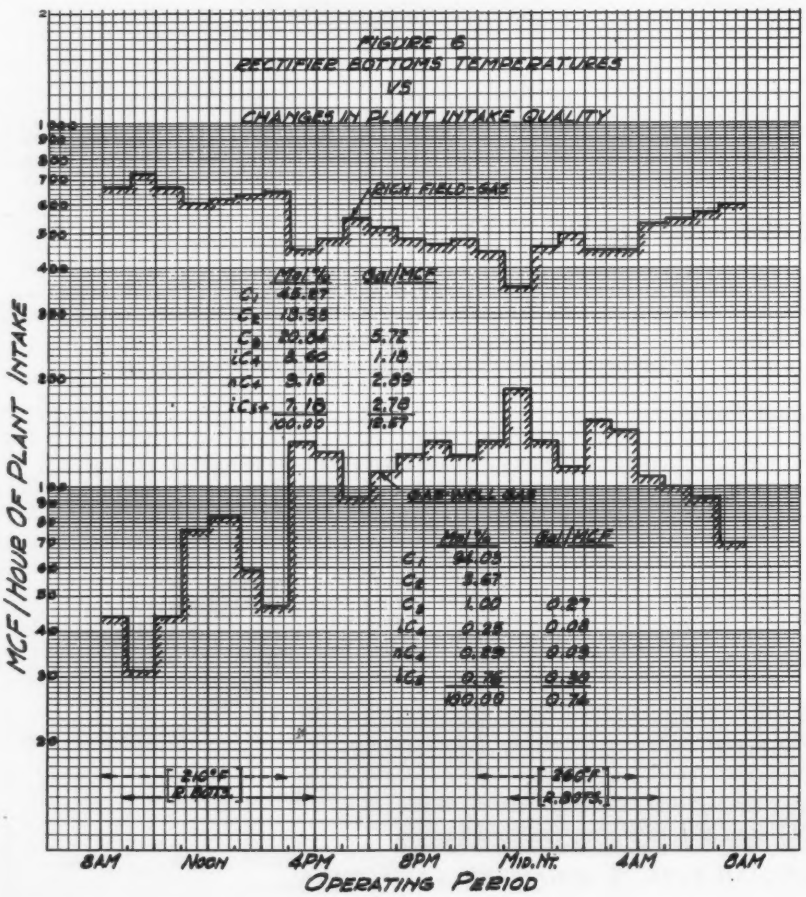


Figure 6 presents a characteristic 24-hour plant-intake record for this unit from which it will be seen that the rich-gas intake rate may vary more than twofold, and the lean-gas intake rate more than sixfold, over a 24-hour period. By appropriate interlocking of temperature and vapor-flow controls at the rich-oil rectifier while holding a constant "lean oil/lean gas" ratio at the re-absorber, it is possible to automatically compensate for the extreme range of plant-intake quality represented by the flow volumes of Figure 6 while consistently producing extra-high yields of close-specification quality propane (i.e. 95% propane absorption followed by a 95% rectifier retention of propane containing not over 4% ethane).

Due to the mechanical arrangement of the equipment in question, it was found more convenient to control the rectifier on the basis of the vapor volumes leaving the top of the rectifier rather than the vapor volumes entering the rectifier base—and the interlocking control of the unit consists of a vapor-flow controller on this stream arranged to reset a temperature controller adjusting the heat supply to the rectifier reboiler.

From "cut and try" experience, it has been determined that for intermediate mixtures of plant-intake streams in the volumes normally encountered, maintenance of a vapor-flow from the rectifier in the amount of 4.5 and 5.0 units on the flow-controller chart will produce a finished propane product containing not over 4.00% of ethane. By similar experience, it has also been determined that the rectifier bottoms cannot be allowed to drop below 210° F., and need not be heated above 260° F., for maintenance of this

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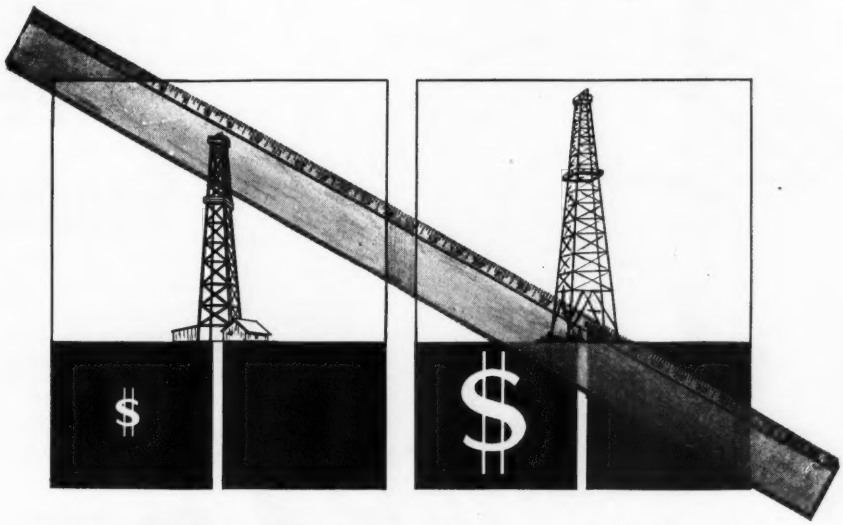


## DRILLING COSTS

Writing in a leading oil journal, a production executive of one of the world's largest oil companies makes the statement that "the average well-drilling costs have more than doubled in the last 10 years." The increase, he says, is the result of higher wages, higher investment costs of equipment, higher cost of materials and supplies, and the greater average depth of wells.

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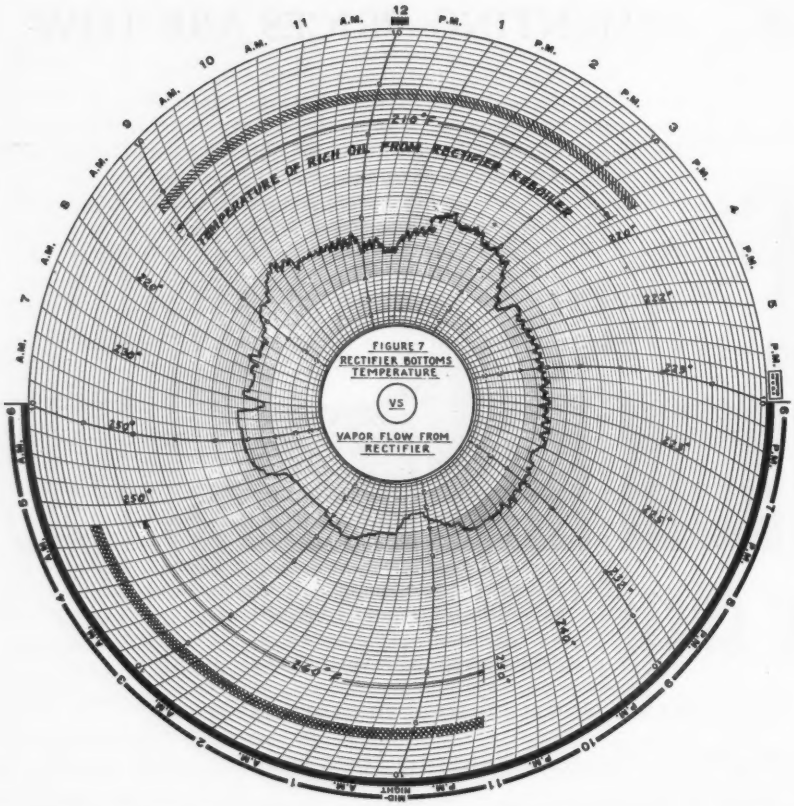


ethane specification irrespective of the resultant volume-flow of vapors from the rectifier. On the basis of these experimentally-derived control factors, therefore, the interlocking "vapor-flow, bottoms-temperature" controls are adjusted so that the vapor-controller will reset the temperature-controller to maintain a vapor flow between 4.5 and 5.0 units on the flow chart between temperature limits of 210° F. and 260° F.—while corresponding "blocks" are set on the temperature-controller whereby this unit will thereafter maintain said temperature limits irrespective of the volumes of vapor-flow developed.

Figure 7 presents a 24-hour chart record of the vapor-flow from this unit, together with an hourly record of the temperature maintained at the rectifier base, for the same operating period as Figure 6. Referring to Figure 7, it will be seen that from 8:50 a.m. until 3:40 p.m. the equipment operated at a fixed-temperature control of 210° F. on the rectifier base; then in keeping with changing plant intake quality, the control temperature was gradually raised from 210° F. to 260° F. between 3:40 p.m. and 11:10 p.m. From 11:10 p.m. to 4:45 a.m. the equipment operated at a new fixed-temperature control of 260° F.; thereafter, due to again changing intake quality, the temperature was gradually dropped from 260° F. to 210° F. by 8:50 the following morning.

In keeping with these temperature shifts, it will be noted that during the periods of changing temperature the rate of rectifier vapor-flow was held largely between 4.5 and 5.0 units, while during the 210° F. operation it rose to a maximum of 6.3 units, and during the 260° F. operation it fell to a minimum of 3.2 units.

For interest in correlating the plant feed composition with these changes in rectifier temperature control, we have indicated the periods of fixed rectifier temperature by appropriate solid lines on the bottom of Figure 6. It should be noted that these solid lines are offset with parallel dashed lines by approximately one hour; that the dashed lines clearly define periods of maximum and minimum rich-gas intake; and that their one-hour "offset" from the solid lines represents the time lag of the rich-oil flow through the large surge drum employed to smooth out the plant's operation.

This particular operation is the most dramatic we have encountered to date in demonstrating the limitation of the simple base-temperature control for precise adjustment of a rich-oil rectifier operating on a high-recovery propane cycle—which limitation possibly accounts for considerable of the troubles encountered in the past with certain of these units in the field.

In closing, we would summarize the position of the rich-oil rectifier in plants anticipating a high-percentage absorption recovery of propane as follows:

1. The prime function of the rich-oil rectifier is to efficiently remove all undesired light components from the rich-oil ahead of the stripping still with a minimum accompanying loss of desired heavier fractions.
2. Installation of a rich-oil rectifier should be given serious consideration whenever stock-tank recoveries of "net" propane are desired in excess of 50%.
3. The excessive heat consumption of the earlier simple cycles can be substantially reduced by employment of appropriate "side-stream" heat interchange at the rectifying section of the unit.
4. In high-percentage propane recovery operations, it will usually be necessary to employ an auxiliary "trimming" control for correlating the unit's operation with 24-hour cyclic changes in plant-intake quality.
5. Of the various auxiliary controls available, direct measurement and control of the volume of vapors introduced into the base of the rectifier offers the most promise—particularly when correlation with an adjusted bottoms temperature control is required.
6. If the 24-hour cyclic change in feed quality is large, it will usually be necessary to coordinate adjustment of both the

(Continued on page 35)

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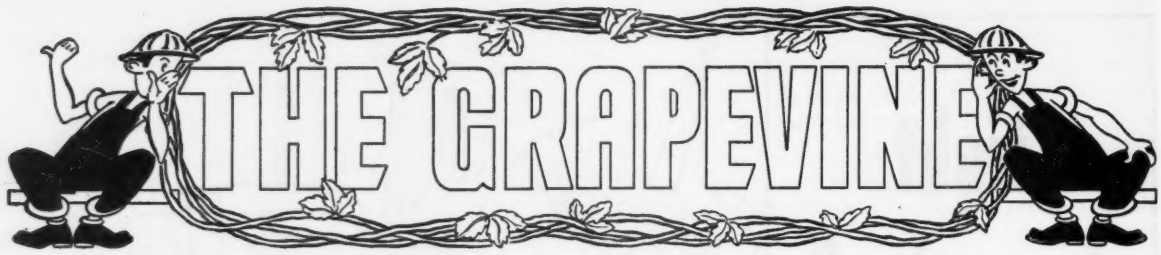



Although California Natural Gasoline Association gatherings always bring back pleasant memories, we can't quite recall ever having had a better time than we had at the Ambassador Hotel during the second day of this year's fall meeting. In the first place, George Tyler, chairman of registry or something equally terrific, appointed us chief spotter for a bevy of very lovely ladies and it turned out to be one of the most interesting jobs we have ever tackled. There were Norma Arteshian, Miss du Pont of California, who between registries was knitting what she fondly hoped would turn out to be a pair of Argyles for some fortunate squire; Alba Gleason who is almost as well known to CNGA members as the Reid Vapor Test; Evelyn Mosher, the Honolulu lass who did such a fine job of directing the Desk & Derrick gals during the last API Convention; Martha Jaycox, from Materials Service Company, with whom we exchanged reminiscences about Jerry Graham, her late boss; Dorothy Johnson, one of George McLaren's top secretaries with whom we discoursed on the perambulations of our mutual friend, Walt Dayhuff; Kathleen Rennie from the Gordon Greene enterprises and if the rest of Gordon's equipment looks as good as that he is certainly launched on a successful career; and we mustn't forget to mention Roma Erickson, the Cooper-Bessemer contribution to esthetic conventioning who did a lovely bit of receiving on the first day of the meeting.

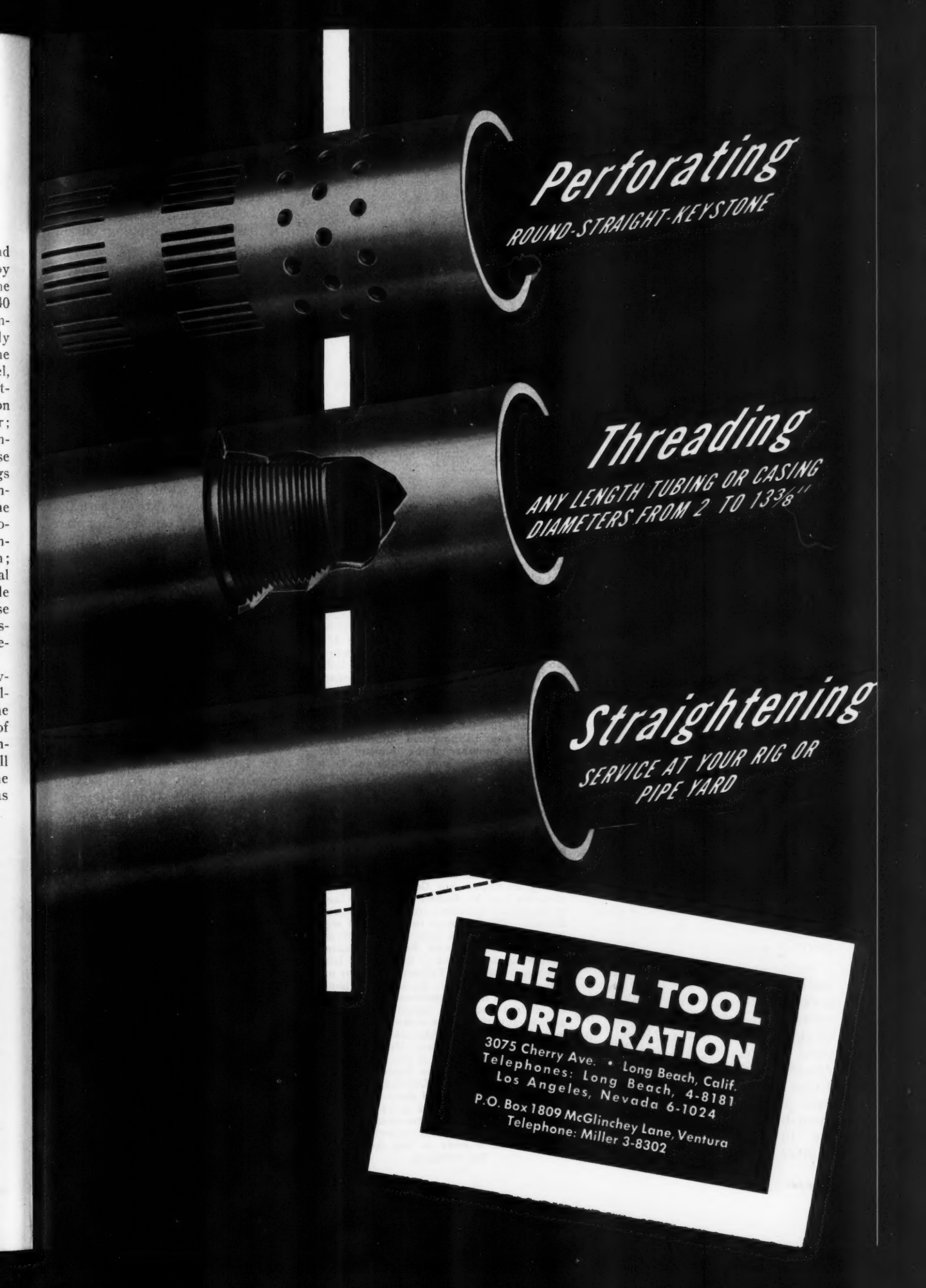
Actually we didn't have to spot any one because as soon as they entered the place and got one glimpse of the girls, like true CNGAers they migrated in the proper direction. They reminded us of so many anions just naturally making for a positive pole. That, of course, made it rather easy for us to catch at least a side look at the customers and we noted some very interesting delegates if we do say so. The old timers were there thicker than a high school girl's chocolate malt and we had rather a busy time standing in the receiving line like a homely prince with six beautiful princesses—we were mostly busy, of course, trying to attract attention but it was pretty hopeless.

Anyway among those coming to pay their respects we noted Tom Taggart, the Standard Oil accordianist without whom a CNGA convention would look silly. We inquired after the wooden putter and found that it has been replaced by a more modern affair—the new one probably isn't more than 30 or 40 years old; Herb Eggleston, the Glendale toastmaster, who has lately done some excellent work in the field of human relations; Carl Abel, whose once sporadic writings attracted so much favorable attention that he is now a full time editor; Harold Moulton, now with the Andrews Butane Company, with whose dad we used to sit in API meetings when he was superintendent for Sunset Oil Company; Val Cassiday, the big, good looking golfer from Lomita Gasoline Company, the general chairman of the Convention; and Andy Kirk, the Balboa nautical chap who makes such a delectable mess of pottage when turned loose in a ship's galley that all the yachtsmen in the Honolulu races bid feverishly for his services.

Another lad who consistently hovered around the reception desk spoiling our chances was that handsome dog, Myron Niesley, proprietor of California Testing Laboratories. Incidentally, Myron did a mighty swell job as entertainment chairman. The show he put on in the evening was

**Left to right: John F. Lynch, La Gloria Corp., N.G.A.A. President; George C. McLaren, Standard Oil of Calif., C.N.G.A. President; Warren H. Kraft, Honolulu Oil Corporation, C.N.G.A. Vice-President.**

**Speakers at General Session, Cocoanut Grove, Ambassador Hotel, left to right: Carlos Wood, Chief of Preliminary Design, Douglas Aircraft Corp.; L. V. Cassaday, General Chairman, Lomita Gasoline Company; R. P. Walsh, Director, Natural Gas Production and Processing Division, Petroleum Administration for Defense; W. N. Munster, Deputy Director, Office of Rubber Reserve.**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one of the best we have seen in some time. So reluctantly we have to congratulate him. Out at the swimming pool in the early evening we sat beside Frick Gibbs who was a sharp swimmer himself in his younger days. In fact he was always a keen competitor in any kind of sport. Then there was quite a stash of high brass from points east of California. Frinstance there was Bill Lowe, secretary of the Natural Gasoline Association of America, from Tulsa, Okla., who has organized more quartets than that barber shop society with the extravagant row of initials.

From Corpus Christi, Texas, came John Lynch, president of the NGAA and president also of the La Gloria Corporation; from Bartlesville Okla, came Paul Tucker, chemical engineer with Phillips Petroleum Company; and from over Texas way, there was Carl Ritter, in charge of natural gasoline operations for Continental Oil Company at Houston. Then there were a couple of delegates from New Orleans, La., no less—Glen Hile and Moke Liljenstein—both with the California Company in the home of the Mardi Gras. Many years ago when Union built its gasoline line from Kettleman to the coast we were one of a small group that was commissioned to check the line from start to finish. Glen Hile was in that little party, and as we remember now the life and soul of the whole expedition was The Texas Company's Hibernian, Joe Scanlon, whose wide vocabulary of little used words had us rolling in the hypothetical aisles. Continuing the roster of distant delegates, we should note Harry Fiske (time to re-tire) general sales manager of the Ingersoll Rand Company, New York, and George Probst, regional manager for Clark Brothers Company in Tulsa, Okla.

At the banquet in the evening we sat next to Don Darnell, the Fluor prexy, a very human sort of individual who gets his diversion out of equestrian exercises. He was in close conversation for part of the evening with Fred Hartley, the Union Oiler, a capable young engineer who has become widely and favorably recognized in the industry. Just a table away we spotted another Union Oiler, Harold McCarthy, proprietor of a penetrating tenor that has washed out many an aspiring quartet. Also close by was Chance Hoag, the Fluor engineer, now semi-retired, and one of the nicest people we know. Back around 1930 we belonged to the same bridge club as Chance and we used to love to watch the aces slipping out of his sleeve.

**A SAN MARINO MAN WITH A GREEN THUMB**

**Malcolm W. "Mal" Morris, general superintendent of the southern district for Standard of Cal. is a friendly sort of chap who has been much in evidence in recent years as a speaker or moderator at many of the more pretentious meetings of the western petroleum industry. He is a charter officer of the San Joaquin Valley chapter of API, and not too long ago did an outstanding job as general chairman of the entire California production section spring meeting. During the war he served on the engineering sub-committee for District 5, later became a petroleum production consultant in Washington, D.C., for PAW, and in many respects has distinguished himself as a substantial member of the industry. Mal was born in Oakland, California, is a graduate in petroleum engineering from University of California, and is one of these rare individuals who paid no attention to Horace Greeley—on the contrary he went east. His first job after graduation was as a trainee with Empire Gas & Fuel Company in Bartlesville, Oklahoma. This required him to sashay around Oklahoma and Kansas quite a bit and when he was finally convinced that California was the place for him, he dashed back to the land of perpetual sunshine and tied up with Standard Oil Company in Taft. That was in 1929. Ten years later he was transferred to Los Angeles Basin, meantime having been elevated to the post of lead petroleum engineer. Following his war assignments as related, he returned home in the role of district engineer in the southern district and quite recently was made general superintendent of the same. Apart from business, Mal gets most of his diversion out of gardening. He specializes in camellias and there is lots of evidence around his San Marino home of a decidedly green thumb. Occasionally for a change he does a bit of deep sea fishing and what he can do to a yellowtail or barracuda must embarrass them no end. Altogether, Mal is a well respected citizen and we find it easy to join the host of his admirers.**

We remember briefly saying hello to Gus Wetzel who used to be entertainment purveyor at many of the early CNGA gatherings. Gus is with Natural Gas Equipment Company, the mention of which always brings back memories of another great guy —Doug Balthis—who was once a popular figure at all association gatherings. Harold Dresser was on hand as usual adding the warmth of his infectious grin to the proceedings. Harold represents the Marley Company and he is another who had a great deal to do with the providing of entertainment for past whingdings and frolics, as well as simultaneously contributing technical information on important aspects of natural gas and gasoline operations. Genial George McLaren, the current prexy of CNGA and Standard of Cal's southern district natural gasoline chieftain, stopped long enough to wish us well. George is a fine gentleman we have long admired and we sure wish him all that he could wish himself for a long time to come.

We later introduced ourself to George's son Bob, a bright looking chip off a distinctly illuminating old block. Bob Tulin, the Shell biggie, did a rare job of going "around the Island" with Hilo Hattie, proving once more that he is one of the best sports in the organization. Last summer at the Frolic he allowed himself to be the target for some sharpshooters who tried their best but to no avail to give him a ducking. Bob is a very serious individual when he is working but he seems to have the capacity to really relax when the time is right, and then you merely have to look at him to know that he is having a thoroughly enjoyable time.

Down in the du Pont suite we ran into that ambassador of goodwill from Wilmington, Delaware, Dave Conklin, who always reminds us of a schoolboy just after his mother

*Jarring Jerry*

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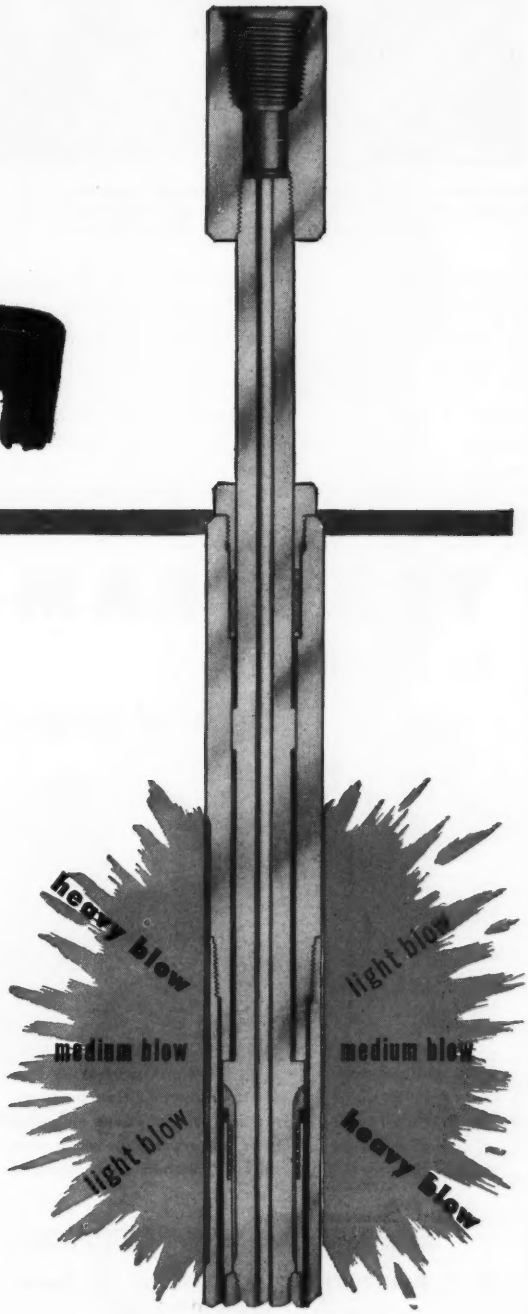


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Registering at Fall Meeting and Principal Speaker, (left) T. S. Petersen, President, Standard Oil Co. of California; (right) Gordon Z. Greene, Committee on Registration.

Left to right: Wm. F. Lowe, Secretary, N.G.A.A.; Paul Tucker, Phillips Petroleum Company; E. R. Millett, Jr., C.N.G.A. Secretary.

has washed his face. Dave's skin has the pleasing hues of a good apple and it literally glows with exhilaration and good health. He is right good company anywhere anytime. George Tyler, du Pont's western manager, did his usual top job of hosting the natural gas boys and they accepted the du Pont generosity in fairish numbers. It was our pleasure during the afternoon to become acquainted with another eminent scion of the du Pont house, one Dr. Dew who appears to sashay up and down the west coast doing a practical public relations stint for his Company.

We almost established kinship with the good doctor before our seance broke up. He has been looking into the family genealogy and has discovered that his name was originally Dhu which, as every imbiber of usquebaugh knows, is as Scotch as the "toorie" on top of a Glengarry bonnet. We expect to do some more comparing of ancestors at a later


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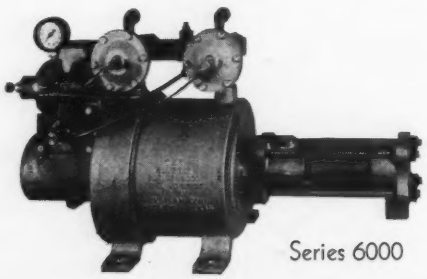

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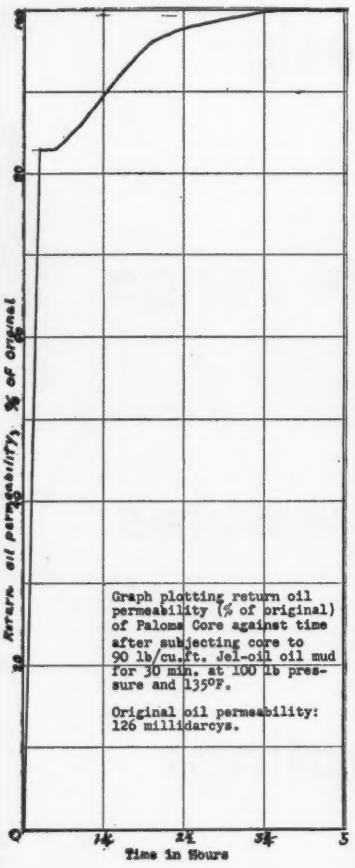
date meantime those readers who are now panting in impatience will simply have to wait.

Any account of a CNGA party would be hopelessly incomplete without some reference to the "give-away" man, namely and to wit, Gordon Z. Greene, whose widespread enterprises are burgeoning like a well nourished watermelon on a stout vine. For lo these many years, Gordon has come to every whinging of consequence and distributed largesse of a strange type. It has usually taken the form of a gadget you peer through and thrill with forbidden ecstasies or another gadget at which you look slyly in an obscure corner and thrill with ditto ditto. We stopped this impresario of the hidden entertainment field and asked him if he had reformed. But no, sir, immediately we brought the subject up, Gordon looked furtively to the left just as furtively to the right, fished this year's gadget out of an inside pocket, thrust it into our eager hands and quickly vanished into the crowd. Meantime, we looked furtively to the left and right and then snuck into the nearest unoccupied corner. Whoopee!

Referring briefly to the entertainment, it was certainly of the best. The acquacade was sufficiently different to excite the most blase. We noted particularly that the out-of-town people were especially impressed. Frankly we think that Johnny Riley is worth the price of admission alone. That little guy comes as near to poetic perfection as any athlete we know and his clownish partner was a dandy foil for the precise effort of the ex-Olympics champ. The whole show, indeed, was excellent, including the twins with their simultaneous exercises and the young lovelies who formed the ballet. So also was the afterdinner entertainment, particularly the kids with the cowbells, Hilo Hattie, and the Roguettes. These are our choice of talent. Anyway, we congratulate Myron Niesley on another very interesting selection of performers and, of course, it is only fair to extend a few kudos to Ed Millett for his excellent overseeing of the whole affair, and to Bill Trask who has been supplying the oil industry with high class vaudeville for more years than his youthful appearance would indicate. And leave us not forget the old maestro, George McLaren and all his aides who are certainly deserving of our thanks or another constructive and productive meeting.


Return oil permeability, % of original
Graph plotting return oil permeability (% of original) of Paloma Core against time after subjecting core to 90 lb/cu.ft. Jel-oil oil mud for 30 min. at 100 lb pressure and 135°F.
Original oil permeability: 126 millidarcys.
Time in Hours


- **JEL-OIL OIL MUD does not lower the original permeability of your oil sand.**
- **Easily controlled weights from 60 to 120 lbs/cu ft.**
- **No water on or in your oil sand.**
- **No mechanical troubles when drilling, testing, coring or surveying.**

**BROWN MUD COMPANY**
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**Los Angeles 19, Calif.**
**York 7494**


Switching now to other recent happenings of more than ordinary import, we note that Frank Gilstrap, the distinguished looking chap who formerly represented five companies and would name them for you on the slightest provocation has now become an attache of the production department of the Long Beach Harbor oil division, and will henceforth be more or less under the direction of our good friend, Frosty Martin. Frank is one of the best and we are certainly wishing him good health and good fortune as he launches out on this new venture. Frank Leonis, the Security Engineering representative, and Johnny Mason whose licks are now put in for Cosasco, are just recently returned from Mexico. Johnny tells us that a flash storm and the flood that followed came near ending all his earthly strivings one night down there. Only the ruggedness and persistense of a good American Ford carried him safely through a mighty uncomfortable adventure to ultimate survival.

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By the way, we forgot to mention that while Frank Leonis was down south of the border he met Ott Hammer, Security's top executive who is also doing the round of the South Americas as we write in the interest of his company. Bob Gaylord, the tall, interesting engineer from the Wagner-Morehouse layout has just returned too from New York after an extended trip through the Latin Americas. While in New York he met Mr. & Mrs. Charles Wagner who were leaving shortly for Panama and thence to Venezuela, Colombia, Trinidad, and several other countries down thataway. Henry Pullman, the Baker Oil Tools cosmopolite, is another who has finally returned home after adding several thousand more miles to his already fabulous record. Jack Ballagh has sold out his Extruders Plastic interests and will in future devote himself vigorously to relaxation.

## FASTER, SAFER, MORE UNIFORM WORK

# *Give the Crew a Power Tong*

HILLMAN KELLEY

HK

1000 MACY STREET, LOS ANGELES 33, CALIFORNIA
District Office: 5830 HARVEY WILSON DRIVE, HOUSTON, TEXAS

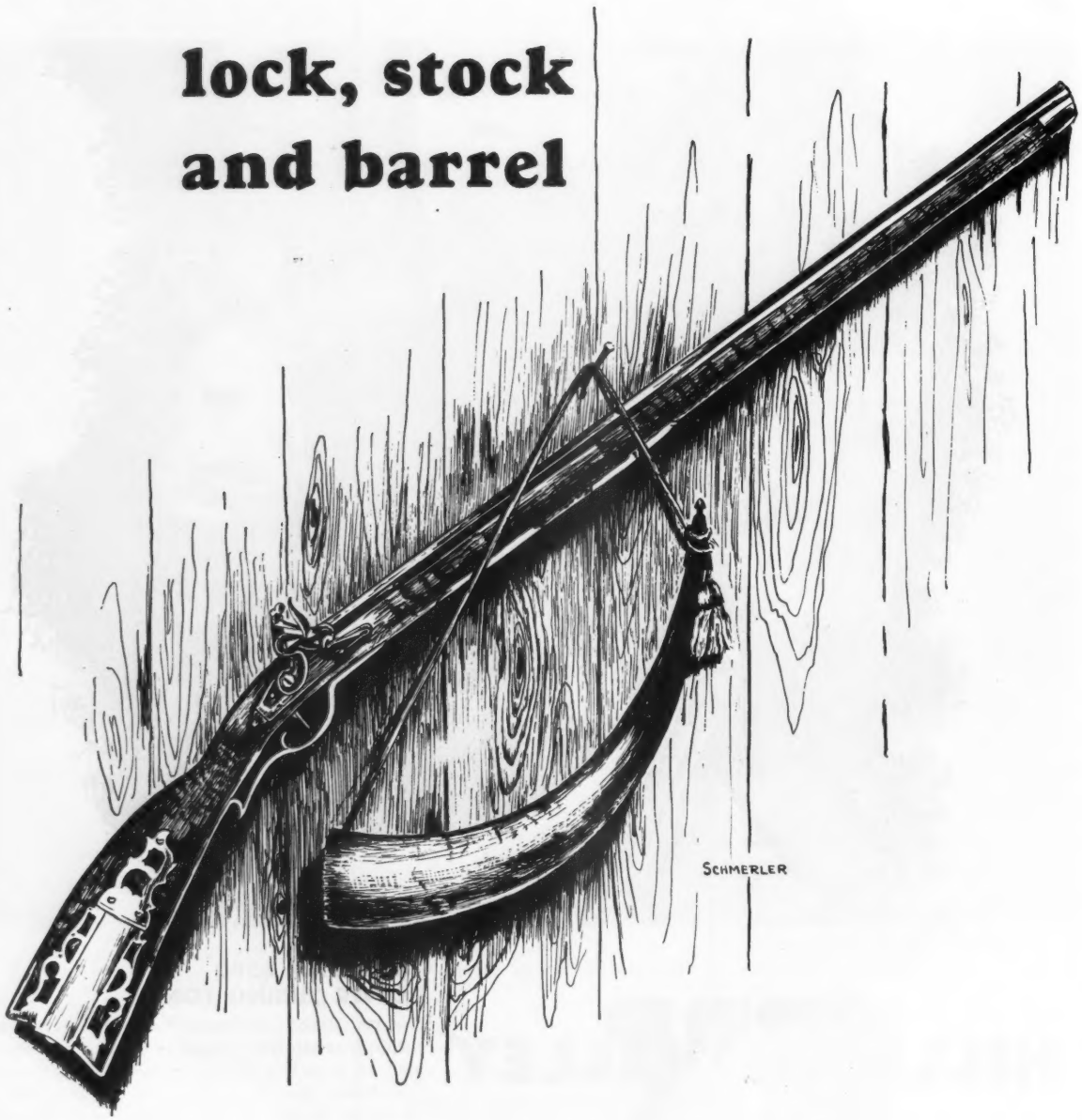
### THE MODEL 3500 POWER TUBING TONG

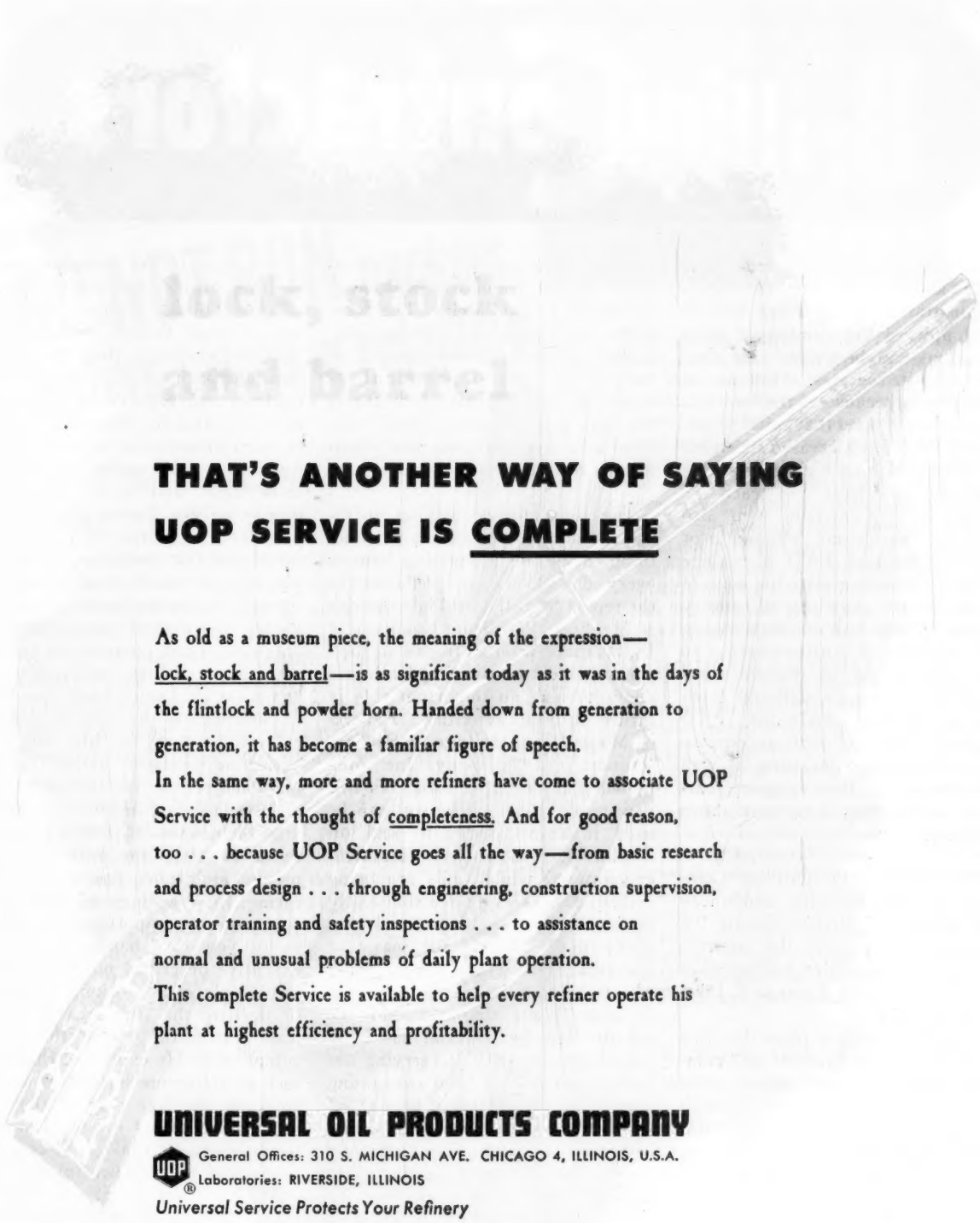
Assures more uniform make-up of string through controlled torque as air motor is operated to a stall with a constant stall pressure. The hoist operator remains at the controls as he is not needed to walk around old-fashioned tong or snipe. Crew fatigue is reduced and faster jobs are accomplished.

### COMPRESSOR MODEL 1000

A compact, efficient, light weight trailer unit. Able to operate tongs under any field condition. Built to carry Tong and Rod Wrench.
Floor mount and skid mount models available.

# lock, stock and barrel





# THAT'S ANOTHER WAY OF SAYING UOP SERVICE IS COMPLETE

As old as a museum piece, the meaning of the expression—lock, stock and barrel—is as significant today as it was in the days of the flintlock and powder horn. Handed down from generation to generation, it has become a familiar figure of speech.

In the same way, more and more refiners have come to associate UOP Service with the thought of completeness. And for good reason, too . . . because UOP Service goes all the way—from basic research and process design . . . through engineering, construction supervision, operator training and safety inspections . . . to assistance on normal and unusual problems of daily plant operation.

This complete Service is available to help every refiner operate his plant at highest efficiency and profitability.

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*Universal Service Protects Your Refinery*

# With Drilling Contractors

Interior Secretary Chapman has made known that the Petroleum Adminstration for Defense has revised upward the number of wells it reasons can be drilled this year in the United States. First set of 43,400 wells because of the limits to the amount of steel that could be obtained, PAD has increased its sights to 43,900 wells and it appears at this time that producers will reach the revised end. Chapman, who also acts as Petroleum Administrator for Defense, said PAD is making every effort to stimulate the amount of steel which goes into oil country tubular goods and in distributing this material is endeavoring to spur exploration to discover new reserves to increase national capacity to produce crude oil. PAD evidently has met with success so far in boosting wildcatting as well completions in this category currently are running 26 per cent above last year.

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Thomas P. Pike Drilling Company of Los Angeles announced that $34,000 was divided among 108 employees as part of the contractor's plan of incentive management with profit sharing. Thomas P. Pike, president said:

"I wish to make it plain that this money is no paternalistic gift coming from men or the company. It is your share of the extra profit which you have earned by your collective efforts to produce more at less cost and to cut down waste of time and material."

Pike revealed that a total of $188,000 has been shared with employees during the four years the incentive plan has been in operation.

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Drilling contractors are interested in proposed regulatory ordinances which would allow oil well drilling within the city limits of Whittier. The move is under consideration by a special committee appointed by Mayor P. J. O'Melia. The committee is headed by George McLaren, general superintendent of the natural gas department of Standard of California. Indications are that the ordinance would supplant a law on the books now which forbids drilling inside the city.

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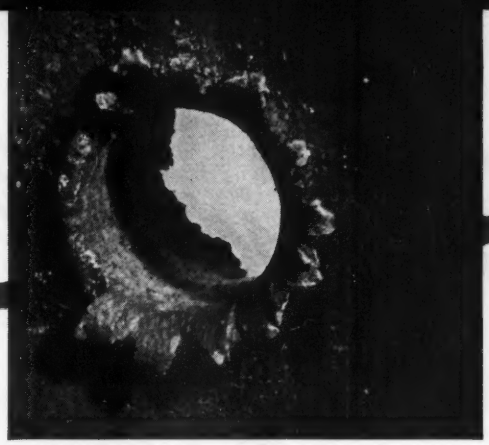
The technique of drilling operations is never static—there is something new and surprising almost every day. This was reflected in the report from the field laboratories of Magnolia Petroleum Company at Dallas that a product from shoe, belt and other factories using leather is about to play an important role in future drilling activities. Experts of Magnolia, an affiliate of Socony-Vacuum Oil Company, Inc., disclosed that "Leather Floc," as this new leather fiber is known, can be used in many places to seal off troublesome sub-surface formation encountered while wells are being drilled. It was explained that leather floc is lighter, cheaper and generally more feasible for many of the conditions where use of other materials was indicated formerly. In some cases, Magnolia said, the use of the new material has eliminated the necessity of carrying out the expensive and time consuming operations of cementing to seal off formations offering trouble. Citing a typical situation, the company stated that this new leather fiber can be used when a drilling bit pokes into a formation of loose or unconsolidated material, permitting a flow of water, oil or gas into the drill-hole. Frequently, according to research experts, when such conditions have been encountered heretofore, it has been necessary to discontinue drilling work until the formation has been sealed off effectively.

Delegates to the eleventh annual meeting of the American Association of Oilwell Drilling Contractors at Fort Worth were told by A. C. (Cy) Rubel that the persistent encroachment of Government controls and regulations of the oil industry must be stopped if the petroleum business is to meet its obligations to the public or exist as an efficient and useful branch of economic life. Rubel, who is vice president in charge of exploration for Union Oil Company of California, viewed the Federal movement toward regimentation of the oil industry as a well-conceived campaign of social planners to control all basic industry under the assumption that since basic resources are essential to the national defense as well as everyday life, they can better be produced under Government subjection. He declared it was unfortunate and unwise for many men of business to help this cause by accepting the bait of cheap money and other concessions and racing to Washington every time there was an opportunity to benefit by New Deal handouts. The oil executive described powerful forces in high places as working to change or destroy the time-proved American system of getting things accomplished. He explained that they seek to substitute bureaucratic controls for the free play of the economic forces, and master planning for individual initiative and versatile proficiency and resourcefulness. The AAODC conclave closed with a record attendance of 1005 compared with 925 at the 1950 meeting held in Tulsa. Oklahoma City was chosen for the twelfth annual meeting. Dates were set by the association's board of directors for September 29-30, 1952. The closing address was given by Percy Craig Spencer, president of Sinclair Oil Corporation.

# DANGER

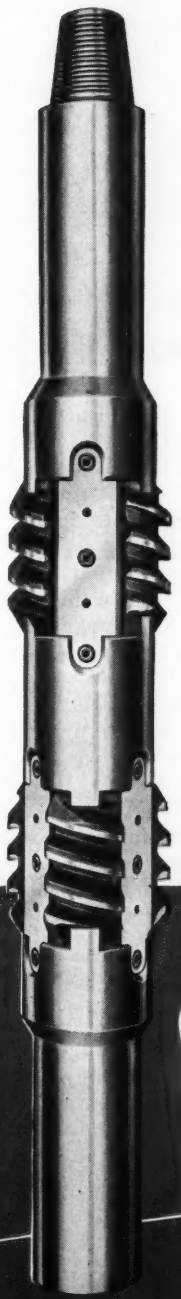


## DO NOT RUN packers, testers, swabs or retainers

*...until the "working surface" of your casing is clean*

This typical burr resulting from a gun-shot hole, clearly shows why so many operators always consider it a "must" to clean the WORKING SURFACE—the vital inner wall of casing—with the new Baker ROTO-VERT Casing Scraper.

It is easy to see why tools with rubber cups, or a rubber packing element, many times fail to set properly, and often are cut, torn and hopelessly damaged while running-in the well. Ninety-nine times out of a hundred, premature setting of packers, testers and retainers, or their failure to effect a leak-proof pack-off, is due *not* to faulty construction or operation of the tool, but to burrs, cement, hardened mud, or other obstructions which . . . PREVENT PASSAGE OF THE SLIPS • CUT OR OTHERWISE DAMAGE THE PACKING ELEMENT; *or* • PRESENT SUCH A ROUGH, UNEVEN SURFACE THAT A LEAK-PROOF PACK-OFF IS IMPOSSIBLE.



The new Baker Model "C" ROTO-VERT Casing Scraper is a helix-blade-type scraper which can be either rotated or "spudded" (reciprocated vertically) for the removal of perforation burrs, imbedded bullets, cement sheath or other obstructions from the inner wall of casing. The body is machined from bar stock, with two sets of machined (not cast) blades positioned for overlapping, 360-degree scraping coverage.

The direction and angle of shear of the deeply hard-faced cutting edges is *exactly opposite* from other helix-blade-type scrapers, which means that the scraping edges of the ROTO-VERT will not "screw down" past burrs, but will actually *shear away* burrs, cement and other obstructions.

### CHOOSE THE BAKER CASING SCRAPER EXACTLY RIGHT FOR YOUR WORK

The new ROTO-VERT Scraper is at its best where hundreds of burrs, with possible imbedded bullets, or unusually long stretches of hardened cement must be removed. It operates successfully *with* or *without* rotary equipment.

***For normal scraping, where rotary equipment is present, the time-tested Baker Model "B" Casing Scraper, Product No. 620-B, continues the popular choice of many operators.***

Why not get in touch with your nearest Baker representative and secure specific recommendations for your next job? Or send for the new illustrated 28-page booklet which contains complete information on the important subject of Casing Scraping the Baker Way.

**BAKER OIL TOOLS, INC.**

**Houston • Los Angeles • New York**

**BAKER**
MODEL "C"
**ROTO-VERT**
CASING SCRAPER
PRODUCT NO. 620-C

**Scrapes the "WORKING SURFACE" of your casing CLEAN and SMOOTH**

# Personalities IN THE NEWS

## Field Personnel Changes Announced by Shell

Several appointments effecting West Coast Exploration and Production staff of the Shell Oil Company were announced recently by S. F. Bowlby, vice president, Los Angeles.

J. E. Clark

James E. Clark, Coastal Division manager, Ventura, moves to Casper, Wyoming, as manager of the company's Rocky Mountain Division. His new territory includes the Montana section of the important new oil producing area in Williston Basin. Clark replaces Paul L. Kartzke, who goes to New York Head Office on special assignment.

Clark joined Shell in 1933 as a pipeliner at Long Beach, became a division production foreman in 1941, and was elevated to manager at Ventura in 1948. He was graduated from Stanford Univeristy just prior to starting with Shell.

B. P. Eastin, presently manager of Shell's Los Angeles Basin operations, replaces Clark at Ventura as manager of Coastal Division. Beginning as a roustabout in 1938, Eastin worked for the company a year, then returned to the University of California at Berkeley for a Masters Degree. He rejoined the company as a trainee and gained wide experience in many locations before his appointment in 1949 as chief exploitation engineer in Los Angeles. Early this year Eastin became division manager of the company's Los Angeles Basin Division.

B. P. Eastin

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Milford Springer, chief counsel for the Southern California Gas Company at Los Angeles told a meeting of the Los Angeles Bar Association that in 1950 natural gas companies in Southern California delivered to consumers a total of 318,000,000,000 cubic feet. Soon we will be importing about half of the annual supply from Texas, he said. The Texas pipeline cost $100,000,000.

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Rush M. Blodget, Oil Producers Agency of California at Los Angeles, is on an extended trip through the east and mid-continent states. During a stop in Texas he will be in attendance at important oil meetings.

Lounsbury S. Fish, assistant manager, department of organization, Standard of California, was a principal speaker at the three-day meeting of the California Personnel Management Association at the Claremont Hotel, Berkeley.

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Reese H. Taylor, president of Union Oil Company, has returned to Los Angeles from a tour of oil areas in the Rocky Mountain region. He said his company plans a $5,000,000 exploration campaign in five Rocky Mountain states. Most of the exploration work will be in Colorado and Wyoming, but it also will spread into Montana, Nebraska and Utah.

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Oilmen Torrey Webb and C. M. Rood were prominent in making the Balboa Bay Club's recent fiesta a great success. The fiesta was a tribute to Mexico and honored guests included Consul General of Mexico, Salvador Duhart.

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W. V. LeFlore and Ben Simmons, Ohio Oil Company in the Bakersfield area, have recovered from injuries recently sustained in a San Joaquin Valley auto accident.

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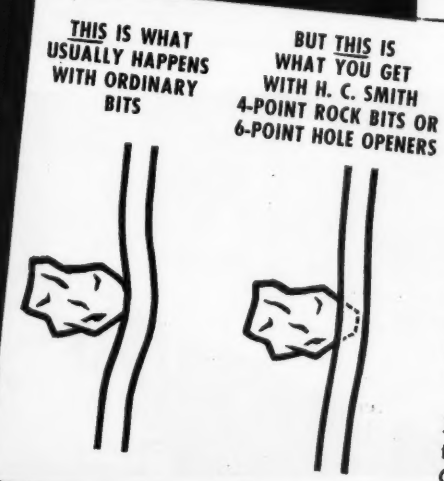
Clarence S. Beesemyer, executive vice president of General Petroleum Corporation and former chairman of the Los Angeles Red Cross chapter, has been named national vice chairman of the Red Cross 1952 fund-raising campaign. Beesemyer was appointed by John S. Sinclair of New York, National Red Cross fund chief, who is president of the National Industrial Conference Board, Inc. In December Beesemyer will accompany Sinclair on a tour of Red Cross chapters on the Pacific Coast.

# One of the best ways to avoid dog-leg hole is to use

# H. C. SMITH ROCK BITS and HOLE OPENERS


THIS IS WHAT USUALLY HAPPENS WITH ORDINARY BITS
BUT THIS IS WHAT YOU GET WITH H. C. SMITH 4-POINT ROCK BITS OR 6-POINT HOLE OPENERS

## *Here's Why!*

In drilling tophole formations, H. C. Smith 4-Point Rock Bits and 6-Point Hole Openers help greatly in maintaining straight, full-gauge hole because of the action of the reamer cutters. H. C. Smith reamer cutters, placed close to the bit and housed with it in one rigid structure, act as guides and stabilizers—keep the bit running dead center, resist every tendency of the bit to "walk around," in contrast to the unstable "pivoting" action of reamers run several feet above the bit. Operators tell us that these H. C. Smith Bits and Hole Openers enable them to avoid dog-legs, even when drilling in unconsolidated boulder conditions. The diagram shows why.

P. S. Operators also like H. C. Smith 4-Point Rock Bits and 6-Point Hole Openers because the position of the reamer cutters allows them to ream the hole to within a few inches of bottom. The 6-Point Hole Opener, incidentally, makes a perfect seat for the tester.

**H C Smith**
**OIL TOOL CO.**

GENERAL OFFICES, EXPORT OFFICE AND PLANT

COMPTON, CALIFORNIA

## F. E. Caddy New Manager of Shell Chemical Plant in Martinez, California

F. E. Caddy, formerly superintendent of Shell Chemical Corporation's Houston, Texas, plant, has been named manager of the firm's plant in Martinez, California, it was announced recently. He succeeds O. M. Williams, who has been made assistant to the vice president in charge of manufacturing in New York.

A native of Wyoming and a graduate of Stanford University, Mr. Caddy joined Shell Chemical in 1931 as a laboratory assistant. He later held various technical and administractive posts in chemical manufacturing at Dominguez and Torrance, California, becoming senior technologist in Shell Chemical's San Francisco office in 1947. He was made superintendent of the Houston plant in 1948.

---

Michael Condon, manager of Burma Oil Company, Pakistan, during his recent visit at Los Angeles, said he doubted if the Russians will benefit from the Iranian seizure of the Anglo-Iranian Oil Company. "How could the Russians get the oil out?" he asked. "As they have no oil tanker fleet, they would be forced to build a pipeline."

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Jacob Harper, pioneer California oil producer, who in recent years has been giving most of his time to his large engineering concern, is back in the development picture. This was confirmed by his acquisition some weeks ago of a wide spread of ground in the Piru area.

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Many members of the California oil fraternity were saddened by the passing of Max C. Fleischmann, 74, chairman of the board of Standard Foods. Bob Lytle was one of Mr. Fleischmann's closest friends. Ranches of the two men at Lake Tahoe adjoined.

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Joseph M. Gross, widely known in oil and real estate circles in Los Angeles, has been elected president of Aeco Corporation. Mark B. Leff, formerly president, was named secretary-treasurer. All the other officers were re-elected.

Back at his desk in his Beverly Hills office is Bill Doheny after a vacation in Honolulu. Bill and his brother, Pat, are carrying on to new fame one of the greatest names in the history of oil in United States.

Ray Loback, president, C. W. Richards, vice president, Alfred A. Gregory, secretary-treasurer; and directors W. E. Turner, L. Pearce Van Tassel, H. H. Ward, A. C. Watson and T. C. Likina of the Lake Elsinore Realty Board are watching closely the progress of an exploratory well on the north shore of the lake. Success of the venture is foreseen by board officials as opening a wide area in Elsinore Valley to possible oil development.

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Charlton H. Lyons, independent operator of Shreveport, La., has been appointed chairman of the Western Hemisphere oil study committee of the Independent Petroleum Association of America.

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Walter J. Andree, Director of Merchandising of Morey, Humm & Johnstone Advertising Agency of New York, has been elected a Vice-President. Andree joined the organization in 1949 after ringing up a 30-year record as Sales Promotion Manager of Sinclair Refining Company. He is a member of the Sales Executives Club and the American Marketing Association.

## Menken Succeeds Decius

F. A. Menken has been appointed a vice president of Tide Water Associated Oil Company and manager of exploration of the company's western division, according to announcement by President William F. Humphrey.

Menken succeeds L. C. Decius who retired after more than thirty-five years of service with Tide Water Associated.

Menken has been employed by Tide Water Associated since graduating from Stanford University in 1926 where he received his A.B. Degree in Geology and Petroleum Engineering. In addition to membership in the American Association of Petroleum Geologists and the American Petroleum Institute, he is a member of the Olympic Club of San Francisco and the California Academy of Sciences.

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Among the many prominent oilmen who made speeches during Oil Progress Week were:

T. S. Petersen, president of Standard of California, at Salt Lake City; H. S. M. Burns, president of Shell Oil, at New York, and Robert L. Minckler, president of General Petroleum, at San Diego.

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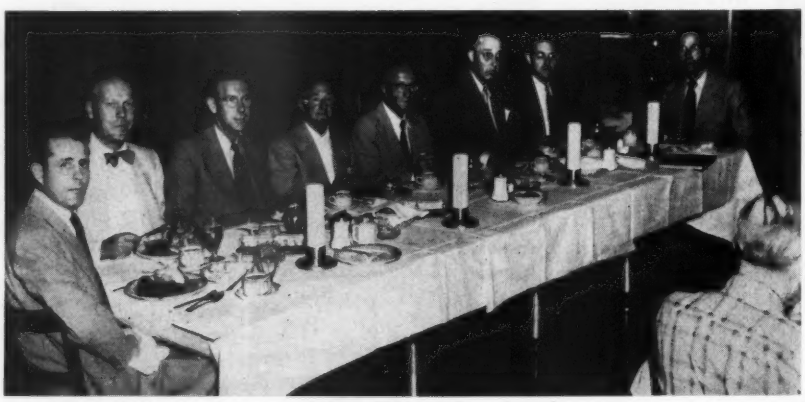
Carl E. Totten,, public relations expert for Shell Oil in Southern California, was the chief speaker at a meeting of gasoline dealers and wholesale agents at Mesa, Arizona.



**Officers and guests of the Los Angeles Basin Chapter, API at a recent meeting in Long Beach, California (left to right): A. H. Curran, Jr., Schlumberger Well Surveying Corporation, Asst. Secretary-Treasurer; William Anderson, Oil Tool Corporation, Secretary-Treasurer; Stafford Park, Fullerton Oil Corporation, Vice Chairman; John McMahon, McMahon Manufacturing Company, guest; W. B. McMahon, McMahon Manufacturing Company, guest; C. G. Gandaubert, General Petroleum Corporation, Chairman; J. J. Browne, General Petroleum Corporation, guest speaker who with E. C. Yerby, Richfield Oil Corporation (not shown), presented a description of the McMahon Jet Oil Well Pump—the highlight of the meeting; Eldon Hair, General Petroleum Corporation, Chairman—Membership Committee.**

# JOB-TAILORED * Cements

## FOR MODERN OIL WELL CEMENTING

**PERMANENTE OIL WELL CEMENTS**

***TYPE C***
*For Wells to 5,000 feet*

***TYPE S***
*For Wells to 8,000 feet*

***TYPE D***
*For Wells over 8,000 feet*

***PERMATEMP***
*For Hot Wells of Any Depth*

The STANOLIND Pressure and Thickening Analyzer predicts performance of slurry under various conditions of heat, pressure, depth encountered during well cementing operation.

In modern oil well cementing practice, the operator must be able to predict slurry performance within very close tolerance under the most variable conditions of depth, heat and pressure.

For this reason, a single type of cement cannot be relied upon to fulfill the multiple requirements of oil well cementing.

PERMANENTE OIL WELL CEMENTS are Job Tailored under close laboratory control to furnish a slurry which will produce a satisfactory seal under the most adverse conditions.

Performance of slurry made with PERMANENTE OIL WELL CEMENTS can be accurately predicted when used in temperatures up to 500° F.; pressures up to 30,000 psi; and at any depth oil wells are now drilled.

*On the job - On time*

PERMANENTE CEMENT COMPANY

PERMANENTE, SANTA CLARA, YOSEMITE AND KAISER BRANDS OF PORTLAND CEMENT AND PERMANENTE LIME PRODUCTS

OAKLAND • PORTLAND • SEATTLE
ANCHORAGE • FAIRBANKS • HONOLULU

# Field Development

## McKittrick Find Flowing

Highlight of the week was E. A. Bender, M. H. Stansbury and Del Webb's discovery with their Anderson No. 1 on Sec. 15-30s-21e, four miles west of McKittrick. The project started off flowing at the rate of 250 barrels of 33 gravity oil through a 12/64-in. bean, cutting only .03 per cent. Drilled to a total depth of 5011 ft., the 7-in. casing was cemented at 4607 ft., 5½-in. tubing hung at 4658 ft. and 2½-in. tubing hung at 4559 ft. Open is about 18 ft. of the Phacoides several hundred feet off bottom. From all reports the combination's follow-up well will be designed to go on down right through the Phacoides for a test of production possibilities in the lower zones. Tide Water Associated, Shell, Hancock and CCMO hold offset acreage. The latter's ground spreads over Sections 15, 16, and 21 to 24 inclusive. These companies have indicated that as yet no plans have been drawn for launching respective drilling jobs. However, in the light of normal field practice they will probably drill by the time the Bender group has got around to a third well. Del Webb of the operating setup is co-owner of the New York Yankees. He is a comparative newcomer to the oil business and so far the luck that has always characterized the American League baseball champions evidently has followed him in development of petroleum. The new oil finder is on a 240-acre lease. Two miles from the discovery, Ohio Oil's Tulare Fee No. 1 on Sec. 19-30s-22e is drilling and spot coring below 6750 ft. The well was the subject of tests higher in the hole. One reacted with considerable oil and a second with great quantities of condensate.

## Fruitvale Test Good

Southwest of the Fruitvale field, Stansbury, Inc., has scored with a wildcat well on Sec. 28-29s-27e named No. 56-28. The venture was drilled to a total bottom of 4301 ft. and after being given the final touch on the pump started to show its natural independence by starting to flow. The rate was about 200 barrels a day of 21 gravity, clean crude oil. Top oil sand was at 4258 ft.

## West Edison Well Abandoned

Every hole punched down cannot be successful and in keeping with this frequent occurrence, Rothschild Oil Company's Porter No. 17-5 at West Edison drilled to 3732 ft. and found nothing of commercial interest. The derrick stood on Sec. 17-30s-29e. Rothschild, incidentally, is one of California's most successful, independent operators. The company is headed by Harry Rothschild, who entered the oil business just a few years after graduating from his "teens." Ever since he has been finding new crude oil and marketing gasoline at an accelerated tempo.

## Placerita Well Pumps

By drilling to a depth of 1450 ft. with its D. W. P. City No. 4 on Sec. 31-4n-15w at Newhall-Placerita, E. M. E. Oil Operators have been rewarded with a generous new pumper. Reports from the field said the well started off at the rate of 125 barrels daily.

## Morro Bay Under Test

Beautiful Morro Bay in San Luis Obispo County is marked for an interesting test well sponsored by M. S. Martin on Sec. 9-30s-11e. The well, tagged Souza No. 1, will prospect about four miles southeast of the town of Morro.

## Puente Nose Wildcat Dry

Texas Company's McGinnis No. 1 wildcat in the Puente Nose area of Los Angeles County evidently had no "nose" for oil for it was given up as a duster at 7589 ft. Located on Sec. 31-1s-10w near the intersection of California and Temple Avenues, electric log was run and sidewall samples taken before the well was abandoned.

The Arvin area of Kern County appears destined for a one-mile extention to the northwest with The Texas Company's Kern Valley No. 1 on Sec. 15-31s-29e. Promising oil sand was cored in the over-all interval from 6275 ft. to bottom at 6330 ft. The well is testing.

## Dagney Gap Try Spotted

Dagney Gap in Kern County has attracted the exploratory interest of Nelson B. Cramer. On a farmout from Gene Reid Drilling Company and B. C. Mackey, he is planning to drill a 1000-ft. test well called Cramer-Independent No. 2 on Sec. 3-25s-18e. Location is a mile and one-half north of Gilliland Oil Company's Strode No. 2, which was the first well to develop Eocene production at Devils Den.

## Salt Creek Hole Listed

That enterprising Western Gulf Oil Company is about to take the the first bite of ground with its core hole on Sec. 30-29s-21e in the Salt Creek area of Kern County. Salt Creek has added a new extension test drilled under the banner of Ferguson & Bosworth. It was Norton-Ashe No. 1 on Sec. 30, which is pumping about 40 barrels day from only 457 ft. The Phacoides oil sand zone is the source of yield.

# The most powerful gasoline your car can use!

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# Los Angeles Basin

### Newhall Try Sited

Location has been staked by Union Oil Company for a test of more than ordinary interest on the Ferguson lease at Newhall-Potrero. The well, Union-Ferguson No. 1, seeks new oil on Sec. 31-4n-16w. The company is rigging its Needham No. 1 on Sec. 13-3n-16w in the Tunnel area. Morton & Dolley has location on the same section for Clampitt No. 1.

### Placerita Try Fishing

On Sec. 36-4n-16w at Placerita, George Dexter's Wagner No. 2 has been drilled 756 feet. A fishing job intervened at that depth and until this is completed normal operations obviously will be at a standstill.

### Bartholomaus Wildcat Digs

A no dope hole under the banner of Bell Petroleum Company in the Bartholomaus Canyon area is apparently making progress below 1000 ft. It is called Bartholomaus No. 74-6 and reposes on Sec. 6-2n-14w. On the same section, the company's Bush Bar No. 1 is redrilling at 2840 ft. Information on this venture is also sketchy.

### Castaic Try Digs

A depth of 11,800 had been drilled by Superior Oil Company with its N. L. & F. No. 1 test at Castaic when last heard from. Location is on Sec. 8-4n-16w.

### Elsinore Try Works

On the north shore of Lake Elsinore in Elsinore Valley, Andrew St. Pierre, Jr., is making headway with the drill at 600 ft.. in his St. Pierre No. 1 exploratory venture, on Sec. 26-5s-5w, Riverside County. Successful exploration here would open great wide spaces to new development. Near Prado Dam, Cherrydale Oil's No. 1 wildcat on Sec. 8-3s-7w is drilling and coring below 2050 ft.

### Chino Hills Adds Wildcat

Chino Exploration Company is rigging its Caspary No. 1 wildcat on Sec. 5-3s-8w in the Chino Hills, San Bernardino County. The company is composed of Newhall Refining Company, Soquel Exploration Company, Thomas Bannon and P.D.T. Drilling Company. L. H. Cameron is beginning work on No. M-8 on Sec. 32-2s-8w. Down 2497 ft., John W. Brashears' Danna No. 1 on Sec. 26-1s-9w at Colton is under repair.

### San Joaquin Test Working

Shell Oil has reached 867 ft. with its Irvine Three No. 66-136 on Sec. 26-6s-9w at San Joaquin Hills in Orange County and the latest information indicated cleanout operations were in progress. At Brea-Olinda, R. B. Watkins has given up at 934 ft. his Coyote Hills No. 1 test on Sec. 4-3s-9w.

### Corona Leased Area

Reports circulating in oil circles denoted that a Dr. Eugene Kronish of New York City has under consideration the drilling of a wildcat well six miles from the town of Corona in Riverside County. He is understood to have assembled about 700 acres there in preparation for the wildcat play.

### West Newport Deal Reported

Reports from West Newport said there was a strong likelihood that George Crawford Atha may take over the Canon Drilling Company's No. 1 on Sec. 13-6s-11w, Orange County. The venture at present is at a depth of 2550 ft., with top zones evidently unproductive. Atha, if he actually takes over the well, probably will take it down to near 5000 ft. for a test of formations deeper.


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## Loma Verde Well Testing

At last reports Trigood Oil Company's Ayala No. 1 explorer on Sec. 29-5n-17w at Loma Verde in Los Angeles County was testing, with bottom at 8401 ft.

## McNally Ranch Wildcat Scene

Texas Company at this writing had not spudded its interesting wildcat on the McNally Ranch southeast of metropolitan Los Angeles. It will poke down on Sec. 23-3s-11w. The company has staked Stanley No. 1 on Sec. 34-5n-17w at Castaic.

## Newhall Test Interesting Job

Southern California Petroleum and Newhall Land & Farming are preparing to begin work on their joint test known as County Line No. 1 on Sec. 32-4n-17w, west of the Sunray-Barnsdall Newhall-Potrero field. The project will be carried deep on property of Newhall Land & Farming in the southeast quarter of the section near the Los Angeles-Ventura county line. The lease block contains 2000 acres and the well is likely to be unsatisfied until 12,000 feet has been reached. The area is of considerable interest and the well is likely to have the close attention of the industry due to the multiple zones known to be productive nearby and also in recognition of the very high acre potential there. Union and Sunray are respective holders of adjacent ground.

## Weldon Canyon Wildcat Quits

A depth of 4518 feet wrote the story of the wildcat journey of Apex Petroleum's Weldon No. 1 wildcat on Sec. 24-3n-16w at Weldon Canyon, Los Angeles County. Nothing exciting appeared all the way down.

## San Fernando Wildcat Works

Los Nietos Company has reached 700 ft. with its Hartman No. 1 wildcat on Sec. 1-2n-16w near the San Fernando reservoir, which at present is requiring equipment, following completion of a minor fishing job. The well is working in the same section as the company's Edwards No. 1, which was drilled some months ago and abandoned. Showings in the Upper Miocene from 3900 to 3980 ft. failed to live up to commercial worth on test. Edwards No. 1 was on land owned by Leroy M. Edwards, industrialist and civic leader.


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## Ridge Route Test Deeper

Southeast of the hamlet of Gorman along the Ridge Route, Continental Oil's Elbe-USL No. 1 wildcat on Sec. 20-7n-17w is continuing to poke deeper at 3276 ft. More than 250,000 acres have been blocked up by leases taken by the company in the area. The company's Phillips No. 1 on wildcat ground in the Whitney Canyon area last was reported making hole at 6100 ft. It is on Sec. 6-3n-15w. Rynne-Fisher No. 2 on Sec. 35-5n-17w at Castaic, another Continental wildcat, is grinding away at 3840 ft. Alexander No. 1, a Castaic test on Sec. 23-5n-17w, is digging at 1780 ft. The company's Bixby No. 62 on Sec. 2-5s-12w at Seal Beach is redrilling at 9920 ft. It went first to 9943 ft.

## Del Rey Try Ready

About to spud in Bolsa Chica Oil's Kidson No. 1-1, an interesting wildcat endeavor on Sec. 22-2s-15w, a mile east of the Playa Del Rey field and within earshot of the surf. The derrick stands near the corner of Lincoln and Culver boulevards.

## Lancaster Wildcat Site

Prospect land in the Lancaster district of Antelope Valley has been singled out by H. W. Shaffer for a test well. His Muntz No. 1 will drill on Sec. 9-7n-14w, a dozen miles west of Lancaster.

Louis B. Mayer, great motion picture producer, thoroughbred horse breeder and philanthropist, is understood entering the oil industry. Unconfirmed reports said Mayer already has engineers and geologists studying prospective land here and there.

# San Joaquin Valley

## Comanche Pt. Try Sets Pipe

Mitchell G. Kovaleski of North Hollywood has set casing in his Black Gold No. 1 on Sec. 32-12n-18w, southeast of production in the Comanche Point field north and west of Tejon Hills. Total depth is 604 ft., with top oil sand at 564 ft.

## Ciervo Try Commencing

In the Ciervo Hills sector of Fresno County, E. A. Bender has started work on his Glenn No. 1 wildcat on Sec. 22-16s-13e, 34 miles northwest of Coalinga. The venture is pointed for a look at the Paleocene and Upper Cretaceous and probably will go to at least 7000 ft. Lease holders in the area include, in addition to Bender, Texaco, Standard and Western Gulf.

## McDonald Fold Wildcat Scene

Superior Oil is preparing to spud its Theta No. 43-20 wildcat on Sec. 20-28-20e between McDonald Anticline and Bacon Hills. The new job, Theta No. 43-20, is midway between Superior's pool opener, known as Theta No. 54, and Texas Company's Tolco No. 1 on the same section. Output of the discovery is reported to have dwindled to 32 barrels a day. The Tolco well appears to be pumping most all water.

## Pleito Creek Wildcat Drills

Humble Oil & Refining Company is making hole below 1100 ft. with its third try in the Pleito Creek field. The well, KCL-B No. 44-35-3, is on Sec. 35-11n-24w. The field was discovered last May with a small pumper producing 25 barrels a day. A second well was completed as a gasser and at present is shut in. It put out some 1,500 cubic ft. of gas a day on test. All wells are on property owned by Kern County Land Company. In the Rosedale area, Humble Oil's KCL-C No. 78-10-1, on Sec. 10-29s-26e, is coring below 6000 ft. The company's Westberg No. 1 on Sec. 34-30s-29e east of Mountain View is down 2453 ft. and fishing. Kirschenmann No. 1 on Sec. 27-30s-29e is being worked over after sanding up following pumping activity. Total depth is 5389 ft., with a plug at 4420 ft.

## Kettleman Test Drills

Capital Company's Capital No. 16-8 exploratory hole on Sec. 8-25s-20e at Kettleman Hills South Dome is digging at 6435 ft.

**Sunray Oil Corporation's N. C. W. No. 5-5 in the Pico Canyon Field. Company rig drilling. Left to right: P. A. White, lead tong; D. E. Underwood, racker; R. W. Shipe, cathead; H. L. Burdg, driller.**

## San Emidio Wildcat Quits

After drilling first to 7205 ft. and then redrilling to 5437 ft., Richfield Oil Corporation has given up its No. A-84-28 on Sec. 28-11n-22w on the San Emidio Ranch, Kern County. A test off bottom resulted in gassy mud. At Edison Groves, Richfield has scored with its Shields-Arms No. 81-32 on Sec. 32-29s-29e. The well started off at 3585 ft. at the rate of 98 barrels of 13.6 gravity oil a day, cutting 2 per cent.

## San Benito Oil Combed

A rank wildcat well of considerable interest has been initiated by Standard of California in the Lonoak area, San Benito County. Called Eade No. 53-26 and on Sec. 26-18s-9e, location is in rolling country about 40 miles northwest of Coalinga. About 10 miles southeast of the new Standard try, Texaco wildcatted without success to 7250 feet. On the Ciervo Anticline, McDonald & Benton's No. 1 on Sec. 19-16s-11e will look for production eight miles west of the Texas Company's Nichols No. 1, finaled in July, 1948, for 20 barrels daily. One-half mile north of the Texaco discovery, Julius S. Beck is preparing to drill his Edward No. 1 on Sec. 28-16s-12e. Indria Oil Company also is participating in the Ciervo Anticline play. It will seek new oil on Sec. 28-16s-12e. Near Bitterwater, Texas Company's Tully No. 1 on Sec. 21-18s-10e is poking ahead below 4100 ft.

## Fruitvale Test Coring

Coring at 4350 ft. was the report at this writing on Bakersfield Oil Company's Hill No. 1 test on Sec. 28-29s-27e in the Fruitvale area.

## Goose Slough Wildcat Spudded

Western Gulf has spudded its McAlpine Comm. No. 57-17 on Sec. 17-29s-25e in the Goose Slough area, four miles west of Greeley field and 15 miles in the same direction from Bakersfield. The well is named after

J. R. McAlpine, owner of the land, and it recalls that more than 20 years ago he subdivided the section into small parcels and sold it to individual purchasers on oil possibilities there. At that time when sale of the section was begun none of the major fields was situated on the floor of the great San Joaquin Valley. However, the geological report filed by McAlpine with the California Real Estate Department, forecast the future discovery of such fields as Greeley, Ten Section, Canal, Rio Bravo and Strand. All of these areas are now major producing fields. The land ever since has been regarded with production favor. Union, Richfield and Superior have undertaken respective offset drilling jobs to the section. Showings were reported promising and it may be that Western Gulf's present effort may find commercial oil which was long ago envisioned by McAlpine. On Sec. 20-29s-25e Texas Company's KCL-Goosloo No. 1 is in the early operational stage. Back to Western Gulf, this company continues to slug away at 10,600 ft. with its KCL-Rock Pit No. 83-12 on Sec. 12-11n-22w in the San Emidio area. In the Wible area, the company's Castro No. 81-13 on Sec. 13-30s-27e at last reports was making hole below 6100 ft.

## Terra Bella Test Staked

Tres Carlos Exploration Company has staked Carlos-Gardner No. 1, a wildcat, on Sec. 35-22s-27e, east of Terra Bella in Tulare County. On Sec. 22, Congress Petroleum's Congress No. 3 is idle at a depth of 840 ft.

## Tejon Hills Busy Sector

Harp & Brown at this writing was nearing the act of spudding with its Harp & Brown-Tejon Ranch No. 1 test on Sec. 23-11n-18w, two miles east of wells producing in the Tejon Hills area. Tejon Exploration Company, composed of Harold C. Morton, Chester F. Dolley, Reserve Oil & Gas, Algonquin Oil and E. B. Hall & Company, is coring at 3300 ft. with its No. 66-21 test on Sec. 21-11n-19w. Tejon No. 2 is a company location for a well on Sec. 8-11n-18w.

## Buena Vista Test Drilling

Drilling is continuing normally ahead at 7536 ft. with California Standard's No. 552-27b on Sec. 27-31s-23e in wildcat territory at Buena Vista Hills. At Elk Hills, Standard's UONPR No. X55-30R on Sec. 30-30s-23e at last reports was growing deeper with coring below 12,300 ft. At Edison, the company has abandoned at 4619 ft. its Voorhees Comm. No. 32 interrogator on Sec. 20-20s-29e. Gray Santa Margarita formation was topped at 4571 ft.

## Beer Nose Try Drills

In the Beer Nose area of Kern County, Steele Petroleum Company's Beer Nose No. 1 on Sec. 6-26s-19e is drilling at 1800 ft.

## Fresno County Accents Drilling

Coast-Gibson Oil Operations is preparing to start work on its Hawn No. 2 on Sec. 14-17s-18e in the Lanare area. The well will drill for production in the Miocene around 7000 ft. More than 100 acres are under lease to the company. Standard of California is in the preliminary stage with its No. 6-9-7E, which will seek a northwest extension of the Jacalitos field. Location is on Sec. 7-21s-15e. In the vicinity of Curry Mountain, Signal Oil & Gas Company's Signal-Camino No. 2 on Sec. 31-18s-15e, is grinding at 650 ft. North of Coalinga on Sec. 31-21s-15e, Humble Oil's Southern Pacific No. C-1 wildcat is still drilling ahead below 9300 ft. Southwest of Coalinga, Jennings & Reese have reached 950 ft. with Chevalier No. 2 on Sec. 12-21s-14e. In the new Camden area, Universal Consolidated Oil's McVicar No. 18-5 on Sec. 5-17s-20e is producing 40 barrels of 32.4 gravity oil daily from the interval of 6017-6022 ft. The well went to a total bottom of 6250 ft., before it was plugged back to 6137 ft. Cleveland Oil's Reid No. 1 on Sec. 6-17s-20e has reached 6200 ft.

## Jasmine Well Adds Producer

Pacific Oil & Gas Development Corporation of San Francisco has completed its Cantleberry No. 82A on Sec. 22-25s-27e in the Jasmine field at 2752 ft. for 85 barrels of net oil daily on the pump. The company's No. 713 on the same section is finishing at 2788 ft., after cementing 7-in. casing at 2761 ft.

## Salt Creek Test Drills

Glenn C. Ferguson and I. W. Bosworth are drilling below 1300 ft. with Richardson No. 1 in Sec. 18-29s-21e on a farmout from Independent Exploration and Los Nietos Company at Salt Creek. This particular sector during past years has been interrogated by several wildcatters without commercial success. On Sec. 19-29s-21e, the partnership has abandoned Anderson No. 1 at a depth of 702 ft. in siltstone. Shut in for storage is the Ferguson and Bosworth new Norton-Ashe No. 1 producer on Sec. 30-29s-21e in the East Temblor area. The project flowed an estimated 200 barrels daily from a total depth of 457 ft. in the Phacoides oil sand zone. Casing is set at 372 ft.

## Rich Oil Ratification

(Continued from page 12)

reboil temperature and the auxiliary control to obtain the desired objective of high rectifier-retention with precise control of light end-product quality.

In closing, we wish to express our indebtedness to the many individuals who have assisted us with time, material and advice in collecting the process data upon which this paper is based, and to their companies for making such data available.

1. Fat-Oil De-ethanization, A. M. Whistler, CNGA Fall Meeting Paper, 1946
2. Fractionating Absorbers in the Petroleum Industry, J. C. Hannah, Petroleum Refiner, August, 1949
3. Ragatz Patent No. 2,548,058.

**This paper was delivered at the Annual Fall Meeting of the California Natural Gasoline Association.**

## Poso Creek Try Shows Oil

Canon Drilling Company's Sally No. 1 wildcat on Sec. 20-27s-27e in the Poso Creek area was last reported pumping oil after first putting out water. Total depth is 1947 ft.

# Coastal and Northern District

## Pescadero Oil Hunt On

Still on at 4650 ft. is the search for petroleum by Texas Company with its Steele No. 1 on Sec. 36-7s-5w at Pescadero, San Mateo County. At Londa, the company's Isenberg No. 1 on Sec. 12-7s-4w is redrilling at 2495 ft., after first going to 4699 ft.

## Dixon Try Staked

Texas Company has staked location for its Bell No. 1, a north extension test of the Dixon gas field in Solano County. It will drill on Sec. 35-7n-2e.

## Santa Maria Try Suspended

From Santa Maria comes word that James M. Irish has suspended temporarily at 1350 ft. his Bogunda No. 1 test on Sec. 3-11n-34w. Ground has been graded for General Petroleum's Houk No. 43-9, a wildcat on Sec. 9-9n-33w at Cat Canyon. Still a location at this writing is Laguna Consolidated Oil Company's Dabney No. 1 test on Sec. 18-7n-30w at Los Olivos.

## Standard Takes Santa Paula Land

International Exploration Company has assigned to Standard Oil Company oil and gas leases affecting several thousand acres of land between Santa Paula and Fillmore in Ventura County. The assignments were filed in the Recorder's office in Ventura County. Standard appears to have about wound up its geophysical inquiry in that part of the county, where it has been active in this direction for more than 90 days.

## Tepusquet Test Drills

In the Tepusquet area of Santa Barbara County, British American Oil Producing is drilling at 1075 ft. with its Rancho Suey No. B-1 on Sec. 5-10n-34w. The company's Santa Ynez Unit No. 3 on Sec. 6-5n-29w in the Santa Ynez district is making hole at a depth last reported at 2440 ft.

## Guadalupe Test Digs

On the historic Rancho Guadalupe in Santa Barbara County, Los Nietos Company's LeRoy No. A-3 on Sec. 22-10n-36w is drilling at 1140 ft. in a hunt for new crude petroleum. Shell Oil's Orton No. 2 on Sec. 27-7n-30w on the Corrall De Quati is digging at 4580 ft.

## Coyote Creek Wildcat Digs

Coyote Creek is the scene of Sunray Oil's Dunshee-One No. 1 wildcat on Sec. 26-4n-24w. The project is drilling at 5540 ft. after losing and recovering cones. On the Santa Ana Rancho, Superior Oil has location on Sec. 9-4n-24w for its Chismahoo No. 1 explorer.

## Reyes Peak Wildcat Works

Way atop rugged and precipitous Reyes Peak in Ventura County, Standard of California is redrilling at 7530 ft. with its Hattie Russell No. 1 on Sec. 11-6n-23w. The project on its first trip went to 7671 ft.

## Paso Robles Wildcat Digs

Paso Robles is a picturesque town noted mostly for its agricultural products. San Miguel is a famed old mission town, founded in California early days by the San Franciscan fathers.

Between these communities, Macson Oil Company is drilling at 2740 ft. with its Linn No. 1 wildcat on Sec. 5-26s-12e, San Luis Obispo County.

Near Morro Bay, M. S. Martin of San Luis Obispo has staked location for a wildcat well called Souza No. 1 on Sec. 9-30s-11e. This is about four miles southeast of the town of Morro.

On the Gonyer Anticline in Hovey Hills, Robert S. Lytle's Dougherty No. 1 is poking toward its objective at 6256 ft. Drill site is on Sec. 6-11n-24w. Shell Oil's ambitious wildcat known as McDonald Estate No. 28-30 on Sec. 30-29s-18e at Simmler is persisting with the drill at 10,700 ft. Texas Company's Santa Margarita Land & Cattle Co. NCT-One No. 1 on Sec. 2-32s-19e on the Sumner Ranch is making hole at 7200 ft. SML&C NCT-Two No. 1 near Barrett Creek on Sec. 5-32s-19e continues to dig deeper at 1630 ft.

## Yolo County Test Staked

Mohawk Petroleum Company has staked location for its Winters Comm. No. 8-1 on Sec. 13-8n-1w, a northwest extension test of the Winters gas field, Yolo County. Drill site

**Independent Exploration Company's crew of head well pullers in the Placerita Field. Left to right: O. H. Hall, W. T. Bruton, J. A. Proctor, and Edwin Harmon.**

is about 2000 ft. south and and southwest of Western Gulf's Wood-Reynolds Comm. No. 1, which was abandoned a year ago at a depth of 5135 ft. Mohawk's lease embraces no less than 1200 acres.

## Turlock Try Idle

Still idle at 3325 ft. is Starlyn Oil Company's Ben Bartlett No. 1 wildcat on Sec. 23-6s-11e in the Turlock area, Merced County.

## Monterey County Wildcatting Lively

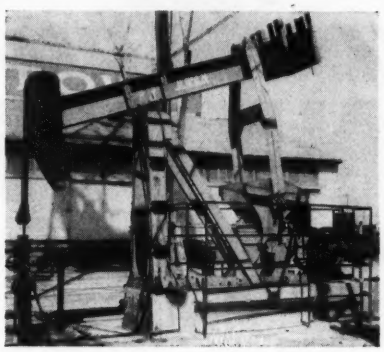
In the Peachtree Valley area of Monterey County, Union Oil's Mee No. 1 on Sec. 11-20s-10e is drilling without untoward incidence at a depth of 1176 ft. Location is about 10 miles northeast of San Lucas along highway 101. A location is Jergins Oil's McCool No. 126 on Sec. 26-22s-10e at San Ardo. South of San Ardo, Wilshire Oil is in the preparatory stage with its first drilling job in that part of the state. The well, Hunter-Dryden No. 71-26, is on Sec. 26-23s-10e on a spread of more than 1300 leased acres. At Lynch Canyon, Texas Company is rigging its Lanigan No. 2 wildcat on Sec. 13-22s-10e. It is starting Alice Garrissere No. 1 on Sec. 24-22s-9e at Los Lobos.

## Vaca Mountain Wildcat Drills

The Vaca Mountain test in Napa County, sponsored by Western Gulf on Sec. 28-9n-3w, is making hole in sand and shale at 6000 ft. Nothing of particular interest has been reported to date. At Moody Gulch in Santa Clara County, Los Nietos Company's Holy City No. 1 on Sec. 9-9s-1w is poking deeper at 2610 ft.

## Kings County Drilling Brisk

Many areas in Kings County are being questioned for new oil. In the Pyramid Hills sector, Nelson B. Cramer has spudded his Dotty No. 1 on Sec. 28-24s-18e. Dohm Oil Company's Fairco No. 1 on Sec. 8-24s-18e is a location. Barnes & Shadrick Core Drilling Company's Lucier No. 1 on Sec. 19-24s-18e has reached a depth of 1515 ft. and is moving in heavier equipment to proceed on down. In the Tulare Lake area, General Petroleum is making hole below 1700 ft. with its Richardson No. 36-4 on Sec. 4-21s-21e. At Kettleman Hills Middle Dome, Middle Dome Corporation's No. 51-32V is digging at 4590 ft. The 9-in. pipe was set at 2480 ft. Six miles east of Hanford, Oilfield Equipment & Supply Company has abandoned its Drummond-Union No. 1-5 on Sec. 36-18s-22e. Prospecting quit at 5375 ft. Location was 600 ft. north and 300 ft. west from Goshen Syndicate's Drummond-Union No. 2 discovery.

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1. The names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, Walter C. Monroe, 765 So. Plymouth Blvd., Los Angeles 5, Calif. Editor, Walter C. Monroe, 765 So. Plymouth Blvd., Los Angeles 5, Calif. Managing Editor, None. Business Manager, Walter C. Monroe, 765 So. Plymouth Blvd., Los Angeles 5, Calif.

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4. Paragraphs 2 and 3 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting; also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner.

5. The average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the 12 months preceding the date shown above was: (This information is required from daily, weekly, semiweekly, and triweekly newspapers only.)

WALTER C. MONROE
(Signature of editor.)

Sworn to and subscribed before me this 28th day of September, 1951.
(SEAL)

C. M. GAIR
Notary Public in and for Los Angeles County, State of California.

(My commission expires Sept. 22, 1953.)


In the preparatory stage by the division of Wage statistics of the Bureau of Labor Statistics of the Labor Department is a new wage study of the petroleum industry. It was requested by the Wage Stabilization Board, which is understood to have before it and awaiting settlement several cases on intra-plant and inter-plant inequities.

Cresslyn L. Tilley has been appointed regional price executive for the Office of Price Stabilization in California, Nevada and Arizona. A San Francisco business executive, he succeeds Bruce W. McDaniels.

# Rocky Mountain NEWS

**Colorado—Idaho—Montana—New Mexico—Utah—Wyoming—Western Canada**

By now the Williston Basin, first hailed in the California Oil World and other oil trade publications as a petroleum province of great promise, has become a subject of national and international interest. Magazines such as Life and the Saturday Evening Post have played up the development of this potentially big area. Recent developments in Iran and Egypt have served to underline the significance of any new oil reserves discovered in the western hemisphere.

Today the discovery of oil in the Williston Basin of North Dakota and eastern Montana easily ranks as the most important petroleum story of 1951.

Interest in the area has been fanned by recent successes which have added up a total of three producing horizons in the Basin: Devonian (similar to Alberta fields), the Charles formation and the Madison lime. Further drilling and correlation will determine the extent of possible production in Silurian and Ordovician zones.

It was only last April that Amerada Petroleum uncorked the Williston Basin play with its discovery at Beaver Lodge in North Dakota, which made the "sooners" in the leasing fraternity rich overnight. Some had amassed large acreages for as little as 10 and 25 cents an acre and soon were to witness rentals soaring to $50, $100, even as high as $300 an acre.

In mid-October, Amerada's second well in the Beaver Lodge area, the No. 1 Dilland in section 31-156n-95w, was flowing 50 bbls. oil per hour—apparently from the Madison lime between 8396-8444 ft. The well flowed gas in four minutes, mud in 17 minutes, and oil in 22 minutes. The gas flow was gauged at two million cubic feet daily. The well, only one and a half miles northeast of the discovery, was rated as a new pay for the Williston Basin.

To summarize developments in the new province, Amerada completed the Iverson for 265 bbls. 38 gravity oil per day, from the Devonian-

if you're not using

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Look around! Ask the men who know — the men who have used Geolograph for years. They'll tell you how Geolograph enables the driller to make the most of every tour! Geolograph's foot-by-foot record shows drilling breaks, the exact time of day each foot is drilled, down time, and round trips!

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Bowen Liner Washers are available in a full range of sizes from your nearest Bowen Service Store—which is open 24 hours a day for your convenience. Next time call Bowen!

**BOWEN FISHING TOOL COMPANY**

Silurian.

Then came the discovery by Shell Oil Co. in the Richey area of Dawson county, Montana, in July. It recovered high gravity oil from the Charles formation; is now drilling below 9,900 ft. to test lower horizons.

Next came Amerada with a wildcat 10 miles north of the Beaver Lodge discovery in North Dakota. The No. 1 Bakken, in Williams county, flowed oil from the Madison at substantial rates and was last reported drilling on down to check on the Devonian.

Shell came along with a second discovery in the Pine Unit, Wibaux county, Montana, where the No. 1 well recovered 370 ft. of about 30 gravity oil. The producing formation, between 8924-8975, was not identified, but is thought to be lower Devonian.

Other Williston Basin wildcats are nearing critical depths. Another Amerada venture, the Binromer-Risser 35 miles southwest of the first discovery, is drilling below 8520 ft. Rumors of shows in the well are not confirmed.

Practically every major company and many of the larger independents have sizable stakes in the new oil province. The deep drilling required, and difficulties of winter operations, may rule out many smaller independents.

Despite the publicity attendant on Williston Basin developments, other Rocky mountain states continued to push ahead with important wildcat successes.

Sinclair's No. 1 Phillips wildcat in the northeast Willard area of Logan, Colorado, made a "D" sand discovery for that area. Located between the Merino and Logan fields in the southwestern part of the county, the well flowed oil from the zone 5114-5145 ft. This venture again pointed up the success attending initial efforts in the Julesburg Basin of western Nebraska, southeastern Wyoming and northeastern Colorado.

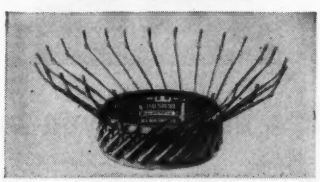
North of the original Gurley pool near Sidney, Nebr.—which opened the Julesburg Basin play two years ago—Olds Oil Co. of Casper recovered oil on a drill stemtest at the No. 1 Laing in section 32-17n-49w.

B and W LATCH-ON CENTRALIZERS

with the NEW KON-KAVE BOW

and

B and W Multi-Flex Scratchers



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With the well at 4740 ft., the operator ran casing for completion to establish another small pool in this basin.

Another interesting development was recorded at Stanolind's Beaver Creek field in Fremont county, Wyoming, long a Tensleep oil producer. The firm not long ago found substantial production in the higher Mesa Verde sand. And recently, Well No. 19, headed for Mesa Verde, tested up to six and one-half million cubic feet of natural gas daily from a sand in the Tertiary. It was the first Tertiary gas production indicated for this area in Wyoming.

There were usually reliable reports too, that Sinclair had tested oil in a wildcat east of the Salt Creek field in Wyoming—from a Wall Creek sand. The company, however, maintained a discreet silence officially. The wildcat is watched with keen interest as another of a series of tests along the west and southwest flank of the Powder River Basin following discovery of oil four years ago in the Sussex area.

Among other important developments of the farflung Rocky mountain region, three operators joined in starting a 5500 ft. Pennsylvanian test in northern Arizona—a state yet to join the oil column. Phillips Petroleum, Sinclair and Skelly Oil will sink a hole down on the 7000 acre block in the Cow Springs area of Coconino county, to test a surface structure. Last April the three firms paid more than $263,000 for the lands, which embrace a well defined surface structure.

Ohio Oil Co. prepared to complete its eighth pool discovery in the Julesburg Basin at the No. 1 Runge in the East Brownson area west of the Huntsman pool near Sidney, Nebr. Drilled to 4990 ft., the well made its best recovery, 2480 ft. of oil, in the first sand. The third sand made a small amount of oil, which turned to water.

C.D. Edmonson and the Kansas Nebraska Natural Gas Co. reported a gas discovery rated at 20 million cubic ft. daily in the Big Springs area of Deuel county, Nebr. The No. 1 Trollstrup Livestock well flowed the big gas volume from the "D" sand between 3215-25 ft. In

the Big Springs field proper, to the northeast, the same operators completed their fifth oil well.

On the Wyoming edge of the Julesburg Basin, Morton & Sons of Long Beach, Calif., have plugged back for further testing of the "J" sand at the No. 1 Rauner wildcat in the Pine Bluff area. Drilled to 7756 ft., the well was plugged back to 7100 for a whipstocking operation. In the "J" sand recently, the well made 720 ft. oil and 90 ft. of muddy oil. Tests below this zone showed only thin mud. The whipstock method will be used to drill a "clean hole" thru the producing sand, avoiding the "masking" action of drilling mud on the sand surface.

Recent sales of Nebraska state oil and gas leases indicate considerable eastward movement of oil activity, particularly in the "Chadron arch" through the central part of the state. Recently Ohio leased lands thru Buffalo, Custer, Dawson and Sherman counties. Bids were lower than those in the western producing counties, but reflected renewed interest in wildcatting in unproven territory in Nebraska.

General Petroleum is venturing another deep test in the general Tip Top area of southwestern Wyoming, where the company scored a discovery earlier in the year. The company is unitizing the Lakeridge block northwest of the Tip Top unit in Sublette county. A Nugget test to around 12,000 ft. is planned. The discovery at Tip Top found oil in the Nugget sand along the overthrust belt along the west side of Wyoming's Green River Basin. A second well, however, found the Nugget sand low on structure.

Interest in Nevada possibilities is revived with the announcement that Gulf Oil has completed arrangements with Phillips Petroleum for a farmout on five blocks thru Elko county, and will drill a 10,000 ft. Mississippian test in the area early next year. It will be north of three failures drilled by Continental Oil and Standard Oil of California in the Basin and Range Province of Nevada. The new venture will be located in twp. 29n-64w.

Carter Oil Co. is still pursuing possibilities in the Powder River Basin of Montana, extending northward from Wyoming's northeast quadrant. No production has been found on the Montana side of the basin to date. Carter is unitizing a block of 15,000 acres in the Forsyth area of Rosebud county, and plans to drill a deep test on completion of the unit agreement.

In the news of personal interest, a group of oil men in Scottsbluff, Neb., recently organized the Western Nebraska Petroleum club. T. O. Matkins of Sinclair was elected president, Lynn C. Williamson of Magnolia Petroleum, vice president; Burr M. Roberts, Bishop Oil, secretary, and John A. Gayle, California Co., treasurer. Meetings are held each Friday noon.

The annual election of officers for the Wyoming Scout association at Casper resulted in A. E. (Eddie) Mills taking the post of president. Dick Leunberger of Sunoco is vice president and Jack Shaughnessy. Pure Oil, secretary-treasurer. W. W. Wampler of the California Co. is editor of the yearbook. Directors include O. L. Plemmon, Sohio Petroleum; Wayne Blackman, Stanolind, and Jack Irwin, Lion Oil.

**How busy can you be?**

**That's a fair question, and you can bet a good answer from Jess Eubanks who is busy every minute giving the kind of *service that makes friends* — and who knows that friends make the *very best customers.* ★ Jess has made a lot of friends around Ventura, Santa Barbara, Castaic and Santa Paula by selling 'em Web Wilson Hooks, Links, Elevators, Tongs and Tubing Spiders—all the best of their kind and mighty easy to service. ★ If you are not already on his list, Jess Eubanks would be a good man for you to know. He hangs out at 1641 North Ventura Avenue, and his phone is Miller 3-6767.**


H. A. (Dave) True, Jr., of the Reserve Drilling Co., Casper, was elected area vice president of the AAODC at the recent annual meeting in Fort Worth.

John H. Osborne, petroleum engineer with the Casper office of the U.S.G.S., was transferred to Thermopolis, where he will assist J. H. Hassheider, district engineer, in the northwestern Wyoming district.

Gaylord L. Campbell recently left his post of geologist with British-American Oil Producing Co. He became district representative for Ginther-Warren-Ginther in the Rocky mountain region. The firm has production in the Dorman pool in Nebraska and two new pools in northeast Colorado.

William B. King, sales manager for Phillips, has moved from Salt Lake City to Bartlesville, Okla., to handle activities for the region.

Fred Reynolds, formerly landman for Stanolind at Wichita, Kan., has joined the large staff of lease men under Walter Davis, Casper Independent broker.

Oilman Paul Stock of Cody, Wyo., recently became a rancher. He is now the owner of the Ed Herald ranch near Cody, a "spread" consisting of 25,000 acres and running 500 head of cattle.

Oil Progress Week, emphasized in press and radio throughout the Rocky mountain region, was acclaimed as a greater success than ever in bringing the story of the industry to the public.

Stopping in Denver during the week, Col. Thomas H. Barton, board chairman of Lion Oil Co., predicted that the Rocky mountain Empire will become "one of the greatest oil producing sections of our country."

Speaking before a meeting of the Denver Chamber of Commerce at the Cosmopolitan hotel, he said oil in the Rockies eventually "will far surpass in created wealth and development that other great natural resource, hard minerals, which has been so generous with you."

The company's faith in the region is confirmed with a divisional office in Denver, a district office in Casper, and another district office in Bismark, N. D.

## Lufkin Introduces Cooling Tower Gears Of Advanced Design

The Lufkin Foundry and Machine Company has just announced the manufacture of five sizes of VB right angle spiral bevel cooling tower gears.

The specifications for the new gears are as follows:

(1) **LUBRICATION**

(a) Standard Units — splash. Top main bearings provided for by oil slinger mounted on pinion shaft. Pinion bearings flooded from oil trapped in upper throughs. Main lower bearings submerged.

(b) **For extreme cold and slow speed operation or half speed backwards.** Gear box designed to take positive displacement Tuthill Pump. Optional. Simple and rugged in its construction, this gear pump insures large volumes of lubricant to all bearings and gear mesh at all times.

(c) Water Condensate Trap. Lower main bearing assured clean, uncontaminated lubricant at all times because of sump-bottom construction of gear case. Sweat or condensate which may accumulate in gear case will gather in the sump below main bearing level and mixture of water with turbulent oil held to a minimum. Eliminates recirculation of accumulated water.

(2) **BEARINGS**

Timken throughout. Designed for 100,000 hours average life. Pinions are mounted rigidly with two bearings and spread apart. Short lever arms— input and output shafts. Main shaft two bearings widely separated. Reduced bearing loading results in longer life for bearings and gears.

(3) **OIL SEALS**

Patented oil seals provided input and output shafts. Oil seal on High Speed Shaft rides on replaceable cast iron sleeve-slinger which prevents harmful grooving of alloy steel forged pinion.

(4) **SHAFTING**

Forged Alloy — heat - treated highest quality steels. Precision ground. Drilled and tapped hole top of main shaft takes lifting ring. Ring provided. Keys provided. External shield mounted on slow speed shaft above upper oil seal—deflects falling water from seal.

(5) **GEARS**

Pinion gear cut integral with shaft. Main ring gears cut from forged alloy heat-treated blanks. Precision cut on Gleason spiral bevel gear generators. Dynamically balanced. Hubs support ring gear well toward outer diameter.

(6) **GEAR CASE**

(a) Sturdy, heavily-ribbed, and poured in Lufkin's 180-ton per day ultra-modern foundry. Generous metal thickness.

(b) Sump - type bottom water trap.

(c) Bottom cover plate removable to take oil pump.

(d) Two oil filler openings mounted at 90 degrees.

(e) Two drain vents on side.

(f) Air vent on top of box. Tapped hole takes pipe connection extending outside air stream.

(g) Oil level indicator plate.

(h) Large inspection cover mounted on one side—for accessibility to view gear mesh.

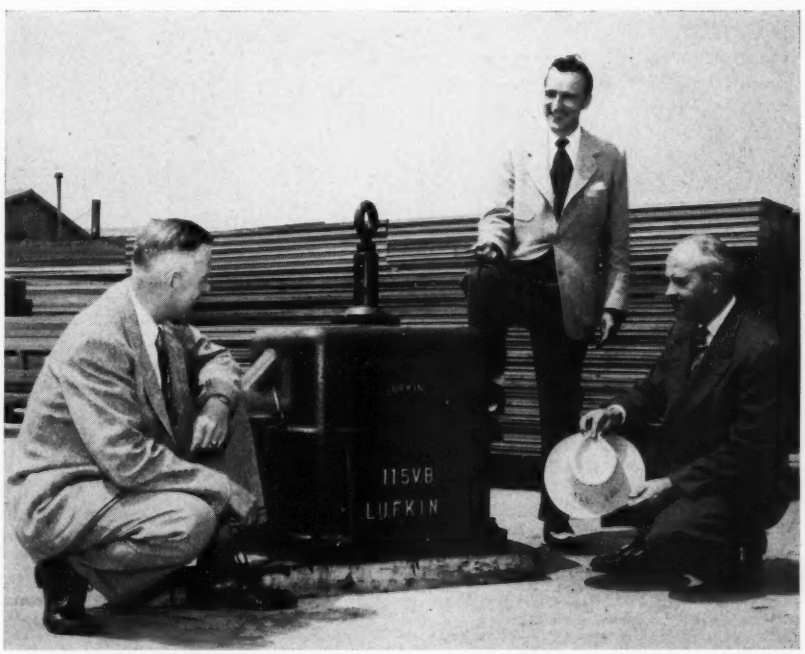
(7) **SHOP TEST**

All gear transmissions run-in under full load conditions in shop where faulty adjustments can be detected before being placed in hands of customer.

V. J. Fawcett, Pacific Coast Manager of Lufkin, states that this is in accordance with his company's established policy

Also according to Mr. Fawcett, Lufkin manufactures the only spiral bevel gear of sufficient capacity to subject the 20 ft. dia. fan to its maximum capacity

Lufkin manufactures a range of 9 sizes of 10 H.P. to 85 H.P. service rating approximately at speeds and ratios to suit fan tip speeds.




**Pictured above, looking at the new Lufkin 115VB Gears are left to right: L. R. O'Bert, Sales Manager Santa Fe Tank and Tower Company; V. J. Fawcett, Pacific Coast Manager Lufkin Foundry and Machine Company and A. M. Kuehmsted, Chief Engineer Santa Fe Tank and Tower Company.**

## National Supply Develops New Air Clutch

National Supply Company's new drum type air clutch, the Ideal Dy-A-Flex, is now standard equipment on five drilling rigs in one to three positions, it is announced. The general adoption of the clutch follows outstanding performance records in the most critical and demanding positions on the rigs and resulting operator enthusiasm.

Five of the National Ideal Consolidated drilling rigs, the 50-A, 75-CA, 80, 100 and 130, have the Dy-A-Flex clutch on the high drum drive. These rigs are rated from 450 to 1300 hp. which cover a drilling depth range of 5000 to 16,000 feet. It is also used on some of these rigs on the low drum drive and master clutch position.

Field replacements have been made on the drum shafts of Ideal Types 50, 75, and 100 draw works that were originally equipped with clutches other than the Dy-A-Flex.

Simplicity, trouble-free performance without any adjustments, and minimum maintenance are the outstanding features of the Dy-A-Flex clutch. Friction shoes are independent, removable assemblies designed for induced cooling by air circulation through light metal construction. They can be removed individually and need not be disassembled for lining replacement.

**Simplicity of the Ideal Dy-A-Flex clutch is shown by disassembly. The ring-shaped air chamber between clutch housing and rubber diaphragm is sealed by flanges of the diaphragm which are squeezed between side plates and internal flanges of the housing. Unitized brake shoe assemblies with large air passages have Manhattan Keylocks with new thin molded block type of lining. Linings may be replaced without removing the clutch housing from the drive shaft by removal of the end plate. Retrieving leaf spring and bar that takes frictional load are also shown disassembled.**

In operation the shoes are urged radially inward against the friction drum by a ring-shaped, molded-rubber diaphragm, which is the inside wall of a ring-shaped air chamber of very small air capacity. The latter assures quick application and release, and minimizes air consumption. Air pressure in the chamber flexes the diaphragm inward. When air pressure is released, retrieving leaf springs completely disengage shoes and drum. Centrifugal force further contributes to the releasing action.

The frictional load on the shoes is taken by bars extending through them into the side plates, thus relieving the diaphragm of these stresses. Retrieving leaf springs are also supported by these bars. The loose fit of the bars in side plate holes permits sufficient radial movement to apply and release the clutch.

Three sizes of Dy-A-Flex air clutch are now put on National Supply drilling rigs, as follows:

| Diam. Inches | Width Inches | Area Sq. In. | No. of Frict'n Shoes |
|---|---|---|---|
| 32 | 6 | 603 | 12 |
| 32 | 10 | 1005 | 12 |
| 40 | 10 | 1234 | 14 |

Slipping torque in ft. lb., based on 100 psi. air pressure, is as follows:

| Speed rpm | 32x6 clutch | 32x10 clutch | 40x10 clutch |
|---|---|---|---|
| 0 | 27,000 | 45,300 | 68,600 |
| 100 | 26,700 | 44,500 | 68,000 |
| 200 | 26,250 | 43,500 | 66,600 |
| 300 | 25,500 | 42,200 | 64,300 |
| 400 | 24,500 | 40,200 | 61,300 |
| 500 | 23,200 | 37,400 | 57,000 |
| 600 | 21,800 | 33,600 | 52,000 |

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A single ballot in a Senate Committee vote postponed oil tidelands legislation until next January.

## Drilling Fluid Division of Macco Corporation Offers a New Drilling Mud Emulsifier

A new drilling fluid material developed to provide a low cost emulsifier or emulsion mud capable of extreme resistance to contamination, low filtrate loss, and with vastly increased lubricating qualities is now being manufactured and marketed by Macco Corporation Drilling Fluid Division of Paramount, California, under the name of MACCO ISO-MULL. The product has proved highly successful in various drilling areas; has amassed excellent records and received congratulatory commendations from many drilling contractors, engineers and large-scale producers.

MACCO ISO-MULL is a dry non-hydroscopic powdered organic compound which will, with the addition of caustic soda and oil, emulsify any conventional clay-water mud. It may be used with or without lime and at low pH as well as high pH. It may be used in the presence of salt, cement, anhydrite, or gypsum and throughout a wide range of concentration, depending upon the mud properties desired and the extent of contamination influences. Product is packed in 4-ply paper bags, 50 pounds net weight.

The 8-page bulletin may be obtained by writing Drilling Fluid Division, Macco Corporation, 14409 S. Paramount Boulevard, Paramount, California.

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Russ Havenstrite, who is probably more acquainted with far-away places than any other member of the California producing industry, has just wound up a tour of interesting points of Africa, Asia and other continents abroad. Only fast travelling planes attract Russ in his travels.

# Baash-Ross Opens Large New Plant In Odessa, Texas

The recent opening of its large new plant in Odessa, Texas, adds another important link to the network of Baash-Ross manufacturing plants, maintenance shops and field warehouses located throughout the major oilfields of the nation. The new Odessa plant, together with the major manufacturing plants in Los Angeles, Houston and Oklahoma City—plus the Baash-Ross field shops and service centers located in Wyoming, Louisiana (two locations —New Iberia and Shreveport), Kansas, Illinois, Texas (three other locations—Corpus Christi, Snyder and Pampa) and California (five other locations—Ventura, Long Beach, Taft, Bakersfield and Avenal)—makes Baash-Ross, with its 17 plants and shops, one of the largest organizations of its kind serving the oil industry.

**46,000 Square Feet of Facilities**

The new Odessa plant is easily the most modern plant of its kind in the entire West Texas area. Situated on a five-acre site on Andrews Highway, about 2½ miles north of the central business district of Odessa, the plant provides some forty-six thousand square feet of working area under roof and craneway. The plant structure has four bays and three craneways, one of which is 460 feet long, with a 60-foot span.

A complete range of heavy-duty machine tools is installed in the plant, including thread mills, turret lathes, hollow spindle lathes, engine lathes, radial drill press, milling machine, shaper, hydraulic straightener and cylinder boring machine, together with accessory machines and equipment, as well as modern heat-treating facilities. Oil men who attended the opening ceremonies at Odessa enthusiastically described this new Baash-Ross plant by far the best equipped and most efficient layout anywhere in the West Texas area.

**Special Facilities for Drill Collars and Kellys**

In addition to facilities for handling regular oilfield equipment, special attention has been given to facilities for handling unusually long and heavy items, such as drill collars, kellys and similar equipment.

Plant design and the arrangement of machine tools has been carefully worked out so that these long and heavy items—virtually impossible to accommodate in conventional shops —are handled with maximum convenience and accuracy in the new Baash-Ross plant.

**Newly-Developed Pressure Welder Is Important Feature**

An item of particular interest in the new Odessa plant is the newly-developed Baash-Ross pressure welding machine which permits welding drill collars together without the addition of foreign metal of any kind, thus assuring more uniform physical properties in the finished product. The pressure welder accomplishes this by a combination of low heat and high pressure so that the portions to be joined "flow" together in what is technically known as "solid phase" welding.

**Also Equipped to Handle Gas Engine Maintenance**

The cylinder boring machine installed in the plant, together with the complete range of other types of machine tools, makes it possible for the new Odessa plant to handle all types of gas engine repair work in addition to the unusually wide range of oilfield manufacturing and repair service provided to the West Texas area.

**L. L. Garren Heads New Plant**

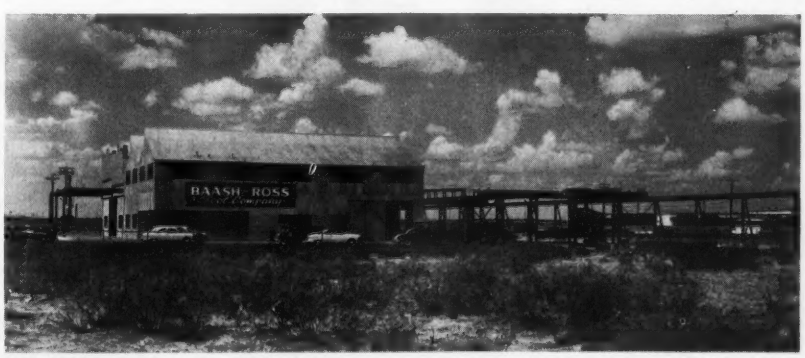
In addition to the manufacturing and machine shop facilities provided by the new Odessa plant, it will also serve as headquarters for Baash-Ross sales and fishing tools operations in the West Texas and New Mexico areas.

L. L. (Red) Garren, Baash-Ross District Manager for West Texas and New Mexico, is in charge of the new Odessa plant, while supervision of the field and plant operations under him are handled by Phil Gibbons, District Sales Manager; Carl Prichard, District Service Manager; Gordon Ford, Plant Superintendent, and Jess Moody, Office Manager.

Oil men located in the West Texas area as well as those passing through are cordially invited to visit the new Baash-Ross Odessa plant, and to use the unusual facilities of this large plant to simplify their maintenance and operating problems.

## Cuyama Valley Venture Working

L. L. Curyea & Associates is preparing to rig up for a test well in the Quatal Canyon area in southeast Cuyama Valley. The well, Curyea No. 23, is scheduled to drill to at least 5000 ft. It is the first of a brace of tests mapped out for the sector where the Curyea interests control some 70,000 acres. Drill site is on Sec. 25-9n-23w. Richfield's Cox No. 46-5 on Sec. 5-9n-26w at the southeast border of South Cuyama is redrilling at 5940 ft. The well is an attempt for a second producer in the sector opened early this year.




**New Baash-Ross plant at Odessa, Texas, one of 17 Baash-Ross plants and shops now serving the nation's oil industry.**

# THIS LAUGH

# OFF!!

An amateur animal trainer took his favorite trick dog to a booking agent for vaudeville shows. "Let me see your dog perform," ordered the agent.

The trainer gave the little Scotch terrier a banjo and the dog promptly strummed off two popular old cowboy songs.

"That's marvelous, marvelous," exclaimed the agent. "I'll buy the act myself and pay you $1,000 a week for it."

"Well," replied the trainer, "I want you to see the entire act." "Whereupon the trainer produced a parrot, which sang the songs played by the dog on the banjo.

"It's stupendous . . . out of this world," shrieked the agent. "I'll give you $2,000 a week for the whole act."

"Well," demurred the owner of the animals, "your price is all right, but . . . you see, I want you to understand that there's a bit of fakery in the act: That dumb parrot can't sing a note; the dog is a ventriloquist."

---

Gas Station Attendant (pointing to choke lever): "You say your car uses too much gas? Know what this is for?"

Woman (airily): "Oh, that — I never use it, so I keep it pulled out to hang my hand bag on."

---

Uncle: "You boys of today think too much about money. Do you know what I was getting when I married your aunt?"

Nephew: "No, and I bet you didn't either."

---

Bride (at ball game): "Honey, why does that umpire wear that funny wire thing over his face?"

Groom: "To keep from biting the ball players."

---

Blonde: "Sorry, soldier, but I never go out with perfect strangers."

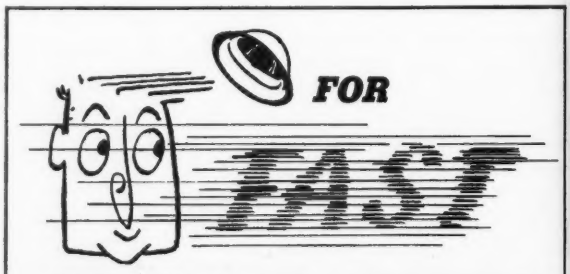
Soldier: "Don't worry about that, babe, **I ain't** perfect!"

---

Sales clerk: "Those men's pajamas? They're $42.50; would you like to buy a pair?"

Gal: "At $42.50? No, ma'am! At that price they should have a man in 'em."

The American-National *Horizontal* Oil & Gas Separator handles a greater volume of gas because of its new super-efficient gas-scrubber unit—and does it more effectively because of larger interface area between gas and liquid. Capacities up to 86 million cu. ft. of gas! Proved on low ratio foamy oil and condensate! Hundreds in operation. Compact, portable! Our service engineers will gladly give you the complete time and money-saving details. Write or telephone today American Pipe & Steel Corporation, 2201 W. Commonwealth Ave., Alhambra, California. CUmberland 3-2181. ATlantic 2-3115. *Bakersfield:* U. S. Highway 99 & Casa Loma Dr., phone: 4-9877.

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